

RESEARCH ON TEACHER RESILIENCE IN BULGARIA: CHALLENGES, FINDINGS, IMPLICATIONS

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Abstract

In an era of intense communication, rapid scientific advance and societal transformations, teachers are faced with challenges putting their resilience to test. Teacher resilience (TR) has become a topical issue over the last two decades with theoretical and empirical studies focused on different facets of this phenomenon with the aim of contributing to teacher well-being and retention, as well as of coping successfully with teacher attrition, burnout and stress. There is paucity in the research on teacher resilience at a national level and very few studies on TR in the sector of higher education. Therefore, by surveying the resilience of the Bulgarian university lecturers from 11 HEIs and using a sample of 582 respondents the author makes an attempt to fill this gap. Highlighting the initial findings of the survey provides for the achievement of this goal, as well as for presenting implications of a universal character.

Keywords: teacher resilience, survey on teacher resilience, research on teacher resilience in higher education, teacher resilience in Bulgaria

JEL: I21, I23

Introduction

Teacher resilience (TR) has been in researchers' focus over the last decades due to a dynamic context involving a variety of social and scientific developments. The technical advance in the area of information and communication technologies resulted in the introduction of numerous novelties in education along with the emergence of new pedagogical approaches. New generations of learners appeared with different learning behaviour, perceptions of life and education, and attitudes to the learning process and teachers. Governments worldwide are changing their views of education and have started reforming it by introducing policies without listening to teachers' voices. The role of teachers in society has been transformed from one of pivotal impact into one of secondary functions thus ruining the prestige of the profession and undermining teachers' dedication to serve as a social cradle of leadership and enlightenment. In addition, the recent COVID-19

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pandemic posed another challenge to the college by accelerating the introduction of new modes of teaching and learning, as well as by highlighting the need of greater flexibility and resourcefulness.

The majority of the research studies on teacher resilience deal with the situation related to pre-service teachers, elementary school teachers and mostly secondary school teachers. There is scarce research on the teacher resilience of university lecturers and paucity of empirical studies on the issue with no scientific works found about the situation in Bulgaria. Therefore, investigation in this direction could reveal commonalities and differences compared to other countries on the one hand and, on the other, could lead to guidelines for more effective policy-making, as well as to insights related to teacher well-being and retention.

Topicality of teacher resilience in modern times

The concept of teacher resilience

There is no uniform definition of teacher resilience which is why there can be differences in the approaches to the concept and its interpretation. According to the person-focused conceptualisation, resilience is an individual trait, while the process-focused one sees it in the person-context interaction where strategies are applied in order to cope with risks and challenges, and to remain committed and perseverant. The context-focused conceptualisation, in turn, lays emphasis on the particular context and resilience is found to be the way to adapt in specific social circumstances. The fourth conceptualisation is the system-focused one. It argues that resilience involves internal and external systems to the individual, and their interplay in a dynamic way.

Gordon and Coscarelli (1996) describe resilience as a “multifaceted phenomenon that comes into existence because of a combination of individual characteristics ... and environmental factors” (Gordon & Coscarelli, 1996, p. 15), thus pointing to its individual and social facets. Beltman et al. (2011) define it as “what sustains teachers and enables them to thrive rather than just survive in the profession”, “the capacity to overcome personal vulnerabilities and environmental stressors, to be able to bounce back in the face of potential risks, and to maintain well-being”, “using energy productively to achieve school goals in the face of adverse conditions”, “capacity to continue to bounce back, to recover strengths or spirit quickly and efficiently in face of adversity” (Beltman et al., 2011, p. 189). Bjekić and Stojković (2022) adopt a common conceptualisation that resilience is “a process and an outcome of successfully adapting to difficult / challenging life experiences and perceived stress as individual feelings or thoughts about

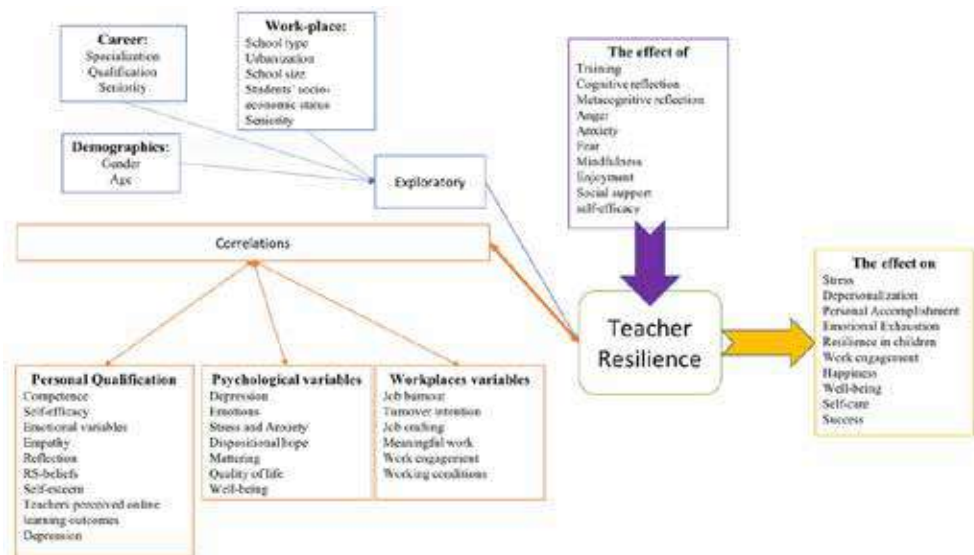
the level of stress a person is experiencing at a given time period” (Bjekić and Stojković, 2022, p. 462).

Mullen et al. (2021) incorporate other scholars’ definitions into theirs assuming that resilience means “optimism, bouncing back from adversity, or bettering oneself through challenges” (Mullen et al., 2021, p. 8) and thus seeing TR as “a capacity to adapt that has been developed or learned, and using strategies to overcome adversity and achieve “good outcomes despite serious threats to adaptation or development”” (Masten, 2001, p. 228; Ainsworth & Oldfield, 2019; Mansfield et al., 2012, 2016; Taylor, 2013 as cited by Mullen et al., 2021, p. 9). Brunetti (2006) conceptualises that it is “a quality that enables teachers to maintain their commitment to teaching and their teaching practices despite challenging conditions and recurring setbacks” (Brunetti, 2006, p. 813) and for Tait (2008) it is “a mode of interacting with events in the environment that is activated and nurtured in times of stress” (Tait, 2008, p. 58), while Sammons et al. (2007) define it as “a dynamic construct subject to influence by environmental, work-specific and personal contexts” (Sammons et al., 2007, p. 694).

Noting that there is scarce synthesis on defining and conceptualising teacher resilience (TR), Munezero et al. (2026) make a systematic review of the existing literature on the issue and to provide for a high-quality examination focus on studies published in Scopus and Web of Science only. The analysis made showed six common themes that, as a matter of fact, reveal different facets of teacher resilience, as well as its multidimensional nature: qualities and strategies for overcoming challenges; positivity amid challenges; equilibrium and commitment; dynamic and developmental process; multidimensional and complex construct; adapting and growing through challenges. Translated on a practical level this means that resilient teachers have specific qualities (competences, strategies, capacities) that employed in critical situations or uncertainties, help them cope successfully; resilient teachers are positive even in unfavourable circumstances; TR involves high levels of commitment and engagement; it is affected by the dynamics and variety of the personal and contextual factors, and the way they impact one another (Munezero et al., 2026, p. 4).

Zhang and Luo (2023) are another scientific team that reviews the literature on TR over the last ten years and published in one of the primary scientific databases to suggest a conceptual framework that integrates all variables and presents a thorough view of this complex phenomenon. The analysis of the 22 articles by scholars from Europe, East Asia, the Middle East, and South America examined results in several findings that are noteworthy: there is a growing interest in the issue of TR along with an increasing recognition of its key role to the proper functioning of the system of education and society. The studies presented in the

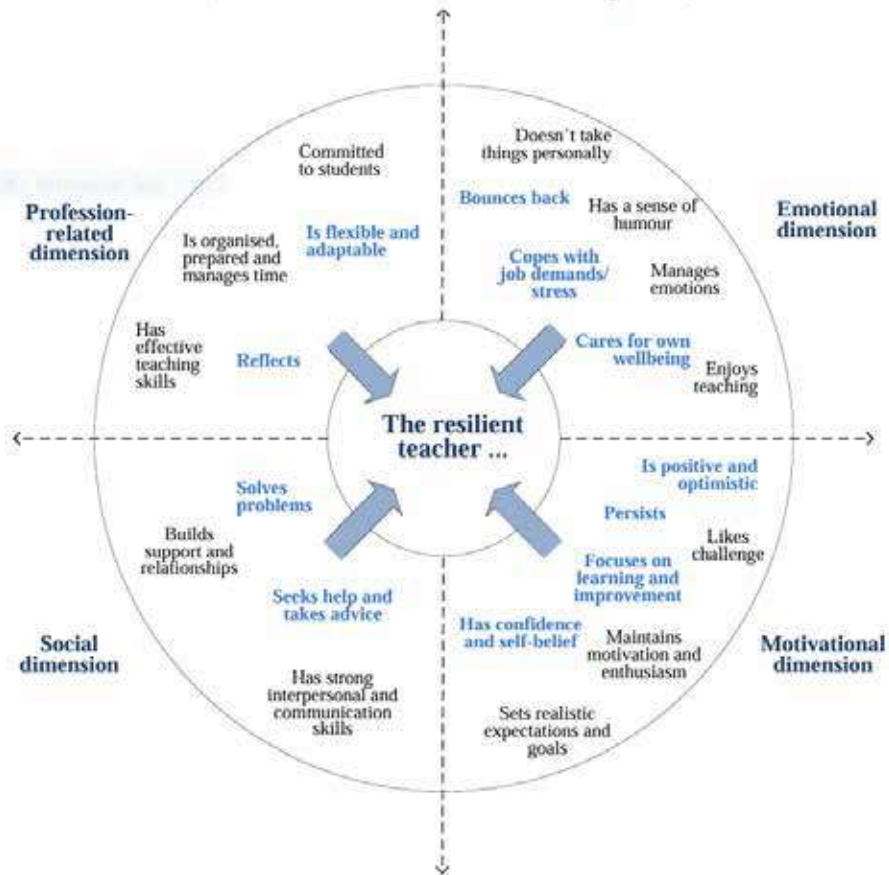
articles include samples of 100 to over 500 hundred. Unfortunately, one study only was focused on higher education. The researchers establish psychological and workplace variables that could sometimes differ depending on teachers' demographics such as gender or age, or depending on the subject taught and educational sector taught in. In addition, they find that specific variables related to personal qualities and competence correlate with resilience. For instance, dispositional hope and mattering, quality of life, emotional intelligence, self-esteem, are in positive correlation with TR.



Source: Zhang and Luo (2023, p. 5).

Figure 1: Teacher Resilience Conceptual Framework

Mansfield et al. (2012b) propose a four-dimensional TR framework in order to provide a detailed picture of the key features resilient teachers are characterised by. Thus, the professional or profession-related dimension reveals aspects of teaching practice like teaching strategies or effectiveness; the emotional dimension shows how teachers deal with stress, challenges or work-life balance; the motivational dimension gives insights into teacher's efficacy, enthusiasm, positivism, improvement or perseverance; while the social dimension is associated with relationships, asking for or giving advice, forming and participating in support networks with colleagues.

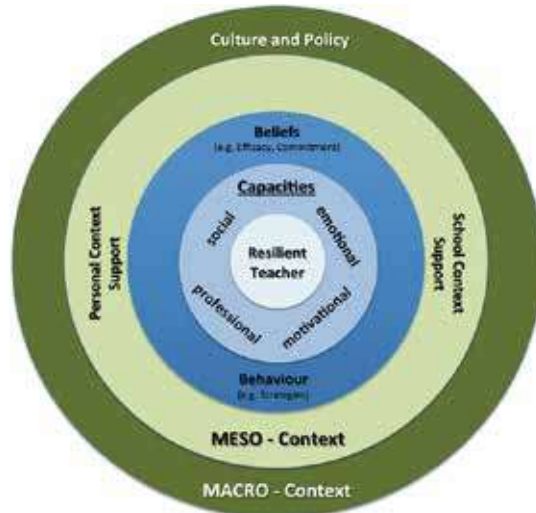


Source: Mansfield et al. (2012b, p. 6).

Figure 2: Teacher Resilience Four-Dimensional Framework

The framework was developed to help changes in teacher education curriculum and based on a survey of different teacher groups under the project “Keeping Cool: Building Resilience” funded by the Australian authorities.

A multidimensional view on pre-service teacher resilience in Germany, Ireland, Malta and Portugal elaborated on Mansfield and Wosnitza’s TR model (2015) and was introduced by Peixoto and colleagues in 2018.



Source: Peixoto et al. (2018).

Figure 3: Multidimensional TR model of Peixoto et al.

Factors contributing to teacher resilience

As Bagdžiūnienė et al. (2023) argue „teachers are the “soft” dynamic, and at the same time, a driving force in this constantly changing education system, and research into the prerequisites for their effective performance requires constant attention” (Bagdžiūnienė et al., 2023, p. 1). Since educational system and society depend on teachers, it is teachers’ emotional resilience that the scholars set out to examine because it is “the internal capacity to adapt, manage or cope with emotionally demanding situations” (Bagdžiūnienė et al., 2023, p. 1). They carry out research aimed at establishing the work-related and personal resources that lead to teachers’ emotional resilience, as well as to see how they relate to teacher well-being and retention. Surveying an impressive number of Lithuanian primary and secondary school teachers, Bagdžiūnienė et al. (2023) conclude that work environment, including social support, performance feedback, career opportunities, autonomy, has a positive effect on teachers’ emotional resilience and together with self-efficacy contribute to well-being and high levels of teacher retention. At the same time, these characteristics are also seen as the personal and job-related resources that help teachers cope with challenges and stress. Conducive environment, organisational mindfulness and support improve teacher performance and enhance TR.

Wang (2021) emphasises the vital importance of resilience with regard to its positive impact on teacher well-being by being felt as a source of job satisfaction, a sense of agency, pride, balanced interpersonal relationships, competency.

In the research they analyse, Munezero et al. (2026) establish the following main protective factors of TR:

- Individual protective factors: personal traits, professional abilities, competences and optimism, strong interpersonal and social skills; sense of humour, positive acceptance of change, acquaintance with students and caring for them; reflection; coping strategies; etc.;
- Contextual protective factors: school culture and administrative support; relationships with and support from the stakeholders – teachers, children’s parents, other staff; relationships with students; income security.

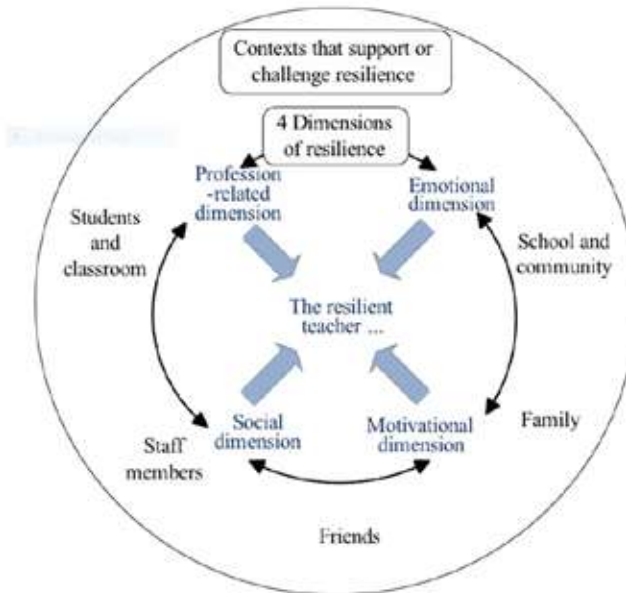
They conclude that individual factors tend to be overemphasised and recommend a balanced approach taking into account both the individual and collective aspects of teacher resilience.

Jonker et al. (2024) study the self-efficacy (a psychological concept related to individual personality) of pre-service teachers in South Africa and measure it by the teacher resilience measure of the FIRE TR scale. Based on previous research, the scholars assume that the most significant contributors to TR are the recovery from setbacks and the confidence in teaching and behaviour management (Jonker et al., 2024, p. 2). In addition, this assumption is backed by the study conducted by Ebersohn et al. (2020) which applied the FIRE scale as well and found out that these contributors are of paramount importance in contexts involving risks and challenges. Therefore, examining self-efficacy and teacher efficacy in challenged contexts becomes the focus of the team’s research as they are “intrapersonal resilience-enabling pathways to teacher resilience” (Jonker et al., 2024, p. 4). The sample includes 193 young teachers and the FIRE dataset includes demographic information as well, aiming to find out more about teacher efficacy beliefs and efficacy by using a structured self-report questionnaire. Establishing more facts about these contributors provides insights into the ways TR is affected by their absence or levels of presence. Research findings show that self-efficacy and teacher efficacy are factors facilitating teachers in coping with challenging situations by applying different teaching strategies, dealing better with challenging learners, using different resources to enhance learner engagement and achieve better educational results.

Reviewing empirical studies on the teacher resilience of early career teachers, Beltman et al. (2011) consider the supports that help teachers be resilient and remain in the profession. They see personal qualities of crucial importance and argue that a high-level self-efficacy and altruistic motives are the key protective factors for an individual. These factors prevent stress, burnout, attrition and facilitate the effective handling of situations in challenging contexts when there are problems with administration, colleagues, learners or risks posed by society or other circumstances. Enhancing the factors beneficial to TR contributes to successfully coping with risk factors or challenges that can be of individual

and contextual nature. The individual ones most often include negative self-beliefs, lack of confidence, fear of asking for help, a perceived conflict of personal beliefs and practices applied. Contextual risks or negative factors, on the other hand, encompass pre-service programmes, family relations, classroom and institutional challenges. Hence protective factors, if stimulated and used effectively, can neutralise risks and strengthen individual and teacher resilience. Among the individual protective factors are altruism, strong intrinsic motivation, commitment, emotional intelligence and stability, a sense of humour, perseverance, coping skills, self-efficacy involving the sense of competence and internal locus of control, self-care, professional reflection and growth, teaching skills. The contextual protective factors involve contextual support from administration and institutions, society, family and friends, mentors, peers and colleagues, quality and specifics of pre-service programmes.

Mansfield et al. (2012b) note the importance of supporting contexts contributing to teacher resilience. They are illustrated below along with the interaction between them. The professional contexts intertwine with personal contexts and thus reflect on teacher resilience. The professional interaction with supervisors, managers, parents, colleagues, students reflects on teacher’s personal relationships with family and friends.



Source: Mansfield et al. (2012b, p. 16).

Figure 4: Contexts supporting the resilient teacher

With regard to the factors providing for and enhancing teacher resilience, Mullen et al. (2021) conduct literature review along with a survey of teachers and conclude that:

“Individual and contextual factors of resilience impact teachers’ development and ability to persevere. These also influence school leaders’ capacity to retain new and early-career teachers... Resilience is associated with retention, job satisfaction, and other positive outcomes for teachers and schools.” (Mullen et al., 2021, p. 11).

What is more, teacher resilience reflects in school culture or organisational resilience. The survey showed that respondent teachers find self-efficacy, positive relationships, passion for the teaching career, commitment, emotions, perseverance through challenges and intrinsic motivation as the most significant individual factors influencing TR, while administrative support, meaningful participation in decisions, school culture, work conditions, reduced workload, competitive compensation and the opportunity to build relationships are perceived as the most important contextual factors of resilience. The researchers also point out that the sense of vocation or purpose is beneficial and prevents teachers from burnout, whereas agency is seen in the acts of taking initiative. One more finding shows that contextual factors such as environmental conditions and challenges can affect the levels of resilience and, therefore, “cultivating teacher resilience requires a multipronged approach to resilient adaptation and functioning in school cultures” (Mullen et al., 2021, p. 14). If an environment is supportive, teachers are empowered, goals are clear and the teaching team is collaborative, there are high levels of TR and retention. Teacher resilience is felt to be a buffer in burnout and stress prevention, a contributor to well-being and productive relationships.

While doing their research on the concept of teacher resilience, Zhang and Luo (2023) establish different variables related to teacher personality, workplace and psychology. With regard to the factors that foster TR, it is worth mentioning Eastern and Western mindfulness, enjoyment, personal mental abilities like cognitive and metacognitive reflection, self-care, job engagement, personal accomplishment.

Castro et al. (2010) state that in order to cultivate teacher resilience, it is possible to use strategies like critical thinking, coaching, professional development, help-seeking, problem-solving, relationship management.

Assessing and measuring teacher resilience

In general, teacher resilience is assessed and measured based on the instruments of psychiatry, clinical psychology and psychotherapy with regards to human resilience. This is why adjustments are necessary to apply them when establishing the levels and specifics of teacher resilience. There are four instruments assessing

teacher resilience that McCreary (2024) finds most commonly used: TRS (Teachers' Resilience Scale) developed by Daniilidou and Platsidou (2018); Mansfield and Wosnitza's MTRS (Multidimensional Teachers' Resilience Scale) (2015); MTRS adjusted for Vietnam and the Asian context, utilized by Trang and Thang (2023).

In their research devoted to the development of a conceptual framework of TR, Zhang and Luo (2023) find out that the most common instruments to measure teacher resilience are the CDRS scale which is based on the Connor and Davidson (2003) study, the Brief Resilience (Smith et al., 2008), the MTRS developed by Mansfield and Wosnitza (Mansfield and Wosnitza, 2015), and the Teacher Resilience Questionnaire (Campbell-Sills and Stein, 2007).

Connor and Davidson (2003) propose a scale that measures resilience as a stress coping ability. Their Connor-Davidson Resilience Scale (CD-RISC) includes 25 items with a five-point Likert scale used to establish the levels of resilience. The higher score indicates a high level of resilience. Resilience is considered in relation to the treatment of anxiety, stress and depression. The scale content is based on the research of other scientists: Kobasa's (1979) construct of hardiness involving commitment, seeing change as an opportunity, the recognition of limits to control; Rutter's (1985) research focused on the personal characteristics typical of resilient people, such as self-efficacy, a sense of humour, engaging other people's support, adaptability, personal and common goals, action-oriented approach, etc.; Lyons' (1991) work – the items aimed at establishing the levels of patience and tolerance of negative effect; as well as items intended to measure optimism and faith. The validation of the scale shows that it is successfully tested and has “sound psychometric properties, with good internal consistency and test–retest reliability” Connor & Davidson, 2003, p. 81) with validity significance similar to other scales in terms of resilience levels, hardiness and stress.

Campbell-Sills and Stein (2007) refine the CD-RISC by modifying it and by developing a unidimensional ten-item CD-RISC which has enhanced measurement efficiency, improved psychometric properties, good construct validity and is internally consistent. The modifications are related to the criteria for factor selection, no factor intercorrelation is permitted, in several cases it was difficult to interpret the factors because of items with disparate themes, the spiritual influences factor was examined through two variables while three to five variables are generally needed for more accurate measurement. Thus the ten items associated with hardiness and persistence involve the ability to tolerate the following challenging circumstances: change, personal problems, illness, pressure, failure, and painful feelings. They reflect the individual's ability to recover and bounce back (Campbell-Sills and Stein, 2007, p. 1026).

Guided by the idea of measuring resilience with regard to regaining and maintaining mental health, Friborg et al. (2005) invented a scale – the Resilience

Scale for Adults (RSA) - consisting of five (out of sixteen originally) resilience factors: personal competence; social competence; personal structure; family coherence; and social support. The final number of items is thirty-three. The researchers aimed at establishing the relations between resilience and personality, cognitive abilities, and social intelligence. The validation procedure, involving convergent and discriminative scale validity, showed that cognitive abilities are unrelated to the RSA.

Beltman et al. (2011) examine the empirical studies on teacher resilience and establish that teacher experiences are most often studied by using interviews and of the 19 studies they considered only nine used a combination of quantitative and qualitative research methods. A great number of the surveys were carried out by using their own questionnaires. Scales and validation instruments were used in 16 studies, documents – in 15, while observations – in 10.

Daniilidou and Platsidou (2018) propose a scale that measures both internal and external protective factors of resilience. The Teachers' Resilience Scale (TRS) they develop is a combination of the CD-RISC and the RSA using their subscales that serve best for the purposes of assessment. CD-RISC was found to be dependent on cultural context in terms of factorial structure and sample specifics of the study, and the separate scoring of the subscales is not recommended by its inventors (Daniilidou and Platsidou, 2018, p. 19). With regard to the RSA, the scholars conclude that since it assesses both inter- and intrapersonal protective factors, it could be applied to a multidimensional TR construct. Being focused on the assessment of internal and external resilience factors in Greek teachers, Daniilidou and Platsidou carry out two studies using CD-RISC and RSA. Based on their results, they suggest combining the factors with sufficient reliability from both scales and creating a new scale. Four factors are taken into account and items from the two scales were included: Personal Competencies and Persistence and Spiritual Influences of the CD-RISC, and Family Cohesion and Social Skills and Peers Support of the RSA. The TRS comprises 25 items – 12 taken from the CD-RISC and 13 taken from the RSA. The scale was successfully validated with good psychometric properties confirmed.

In their survey, Munezero et al. (2026) establish that in the majorities of the studies on TR, quantitative methods were applied of which twelve scales, five surveys, a questionnaire and an inventory. In the cases in which qualitative methods were used, data were collected by interviews complemented by job shadowing, classroom observations or field notes. Of the instruments applied to assess TR, only eight were particularly invented for teacher resilience, while the rest were adjusted. These eight instruments include: Multidimensional Teacher Resilience Scale (MTRS), Teachers' Resilience Scale (TRS), Teacher Resilience Instrument (TRI), Global Measure of Teacher Resilience (GMTR), three surveys,

and one questionnaire. As regards the “what” to measure about TR, the same scientific team identifies twenty-five dimensions that can be grouped into five major categories: professional competence and motivation; adaptability and adjustments; emotional and psychological resilience; personal competence and coping style; social support and interactions (Munezero et al., 2026, p. 4). Most often, the item type is a five-point Likert scale, but there are also 4-, 6-, 7- and 10-point Likert scales used.

MTRS is based on the four-dimensional TR framework considered above and developed by Mansfield et al. (2011). Initially, it included three dimensions (motivation/emotion, professional, and social) and 26 items, but Peixoto and colleagues (2020) conducted a study on the resilience of Portuguese teachers, in which the MTRS was confirmed by 13 items for four dimensions (professional, emotional, social, and motivational). The Mansfield and Wosnitza (2015) Teacher Resilience Questionnaire – Version 1.5 which is based on the MTRS seems to be the prevalent scale used by researchers worldwide along with TRS.

In 2022, Daniilidou and Platsidou proposed the TPFRS (Teachers’ Protective Factors of Resilience Scale) to include key protective factors of resilience that had not been part of a scale so far. TPFRS is based on MTRS and TRS, and is a comprehensive scale for assessment of personal and environmental protective factors of resilience. The scholars assume that these two groups of factors are in a constant interplay and together form teacher’s resilience and ability to respond to adversity. Taking into account the criticism related to the fact that major protective factors had not been measured, Daniilidou and Platsidou added to their scale two more – **Teachers’ values and beliefs**, and **Emotional and behavioural competence**. This instrument was successfully validated and includes 29 items with responses given on a five-point Likert scale.

Trang and Thang (2023) set out to develop a scale for Asia by using the TRS and MTRS, and call their assessment instrument Vietnam Teachers’ Resilience Scale (VITRS). It contains twenty items and evaluates four dimensions of resilience – social, professional, emotional and personal. It has shown high levels of reliability and validity and can be applied for both school and university teachers. What is specific about VITRS is that it is designed for the Vietnamese context, especially the philosophical background of the educational system of Vietnam.

Research on university lecturers’ resilience

Isnainy and Zainaro (2024) consider academic teacher resilience with regard to its crucial role for the preparation of knowledgeable professionals. They see TR as a must because of the growing professional demands, administrative burden and workload, and increased requirements related to both teaching and

research, all resulting in higher pressure on faculty and causing problems related to their well-being. Resilience is defined as “the ability to recover and positively adapt to stress” (Isnainy and Zainaro, 2024, p. 1146) and the researchers find it of key importance because it is the way to manage successfully at work and meet the demands and requirements there effectively. Resilience is associated with endurance, motivation and high-quality performance, enhanced learning environment, and its low levels can lead to burnout, reduced productivity, teacher attrition (Smith and Lee, 2020; Jones, 2021; Anderson and Lewis, 2022; Foster et al., 2023). Hence investigating the significance of resilience with regard to lecturer performance is worth conducting research. The survey Isnainy and Zainaro carry out includes a sample of 203 respondents from Lampung Province in Indonesia. The questionnaire used is a standardised one with questions aimed at collecting information about respondents’ ability to recover in stressful or unexpected situations, cope with negative emotions and experiences, effectiveness and performance, reflection. The Goodness-of-Fit Index and the Standardised Regression Weights Analysis for lecturer performance show that resilience has a positive influence on performance, ability to maintain good levels of resilience, flexibility. Another noteworthy finding is the lecturers’ need of greater institutional support, recognition of achievements and efforts, provision of adequate resources.

Assuming that resilience is most needed in stressful times and teaching profession is one of the most stressful ones, Bjekić and Stojković (2022) set out to investigate the resilience of faculty staff and its correlation with perceived stress. Three key questions are to be answered: “Are university teachers resilient? What are the differences between teaching university staff from different educational fields? Are there differences in the resilience and perceived stress between different universities’ educational settings or school cultures?” (Bjekić and Stojković, 2022, p. 465). The research variables include resilience, measured by the Brief Resilience Scale; perceived stress measured by the Perceived Stress Scale; faculty positions; field of teaching; university experience. A survey was conducted based on a quantitative approach and the sample included 100 respondents. Among the most important findings are the medium-high level of resilience and the low level of perceived stress with a negative correlation between these two variables; the lack of differences in the level of perceived stress in terms of academic teaching experience and educational field.

Garcia-Rivera et al. (2022) examine the impact of resilience on university lecturers’ burnout syndrome. Although their research is related to the experience during the pandemic period, the research team establish facts that can be of general use in challenging situations at work. The study the scientists carry out is based on the CD-RISC-25 and SBI questionnaires, and the sample includes

831 Mexican faculty members. What was found out was the strong correlation between resources availability and accomplishment in teaching, cynicism and emotional exhaustion. Burnout syndrome is considered a mental illness caused by occupational stress over a long time that has not been dealt with effectively. It is associated with demanding jobs, lack of resources or the mismatch between job demands and resource availability, and affects people working mostly in social, biological and psychological fields – teachers, policemen, social workers, etc. (Garcia-Rivera et al., 2022, p. 2). Furthermore, the team note the major reasons for faculty burnout – intense interaction with students which causes emotional exhaustion, consumes time and is mentally challenging; social attitudes to the teaching profession; inadequate payment; lack of institutional support and recognition (ibid.).

Focusing on contextual resources and the impact of resilience on faculty burnout, Garcia-Rivera et al. establish that resilience has low impact on guilt, but is of significance in terms of emotional exhaustion with faculty who have families showing greater stamina. Additionally, high levels of resilience influence work excitement and result in enhanced effectiveness. The study showed a link between resilience itself and burnout, even though it is of no great significance. Faculty with high academic resilience do show lower levels of burnout risk and have greater protection against the negative factors leading to burnout.

Sierra-Molina and Sevilla-Santo (2021) use case studies to establish how faculty staff build high resilience based on a triadic perspective involving the development of new strategies encompassing individual personality features, supportive family relations and a supportive context. The scholars present eight case studies of faculty staff working in Mexican universities and manage to show that professional environment and teaching work are both protective and risk factors that affect the level of resilience. Depending on their quality, personal background and family environment, as well as institutional context - attitude and support or their lack – could also play the role of protective or risk factors. Discussing major questions, the eight university lecturers share information allowing to identify personal, social, professional and institutional factors that can influence the level of resilience if perceived to be protective and not risk ones. Sierra-Molina and Sevilla-Santo conclude that currently teaching is much more stressful compared to past times and those faculty members who are flexible and adaptive to changes, open to innovations and reflect on the ways to combine the internal and external aspects of their jobs, manage to build high resilience.

Research on teacher resilience in Bulgaria

Challenges

Even though the teaching profession has been in a dynamic process of change and transformation worldwide, it is worth considering the situation in a particular country and educational sector as the specifics could help find universal solutions or recommendations. Hence the focus here is on the Bulgarian context and the issues Bulgarian teachers are faced with and how they manage to build and maintain resilience.

The challenges associated with the research on teacher resilience are either related to teachers as individuals and professionals, or to teachers and researchers as respondents. Having chosen a socially specific career path, teachers are more exposed to certain unfavourable circumstances that result in higher risks of negative or stressful experiences. Among the key challenges to teachers is the growing pressure of varied nature: from institutions; related to socio-economic factors; or due to the new generations and the new developments in ICT, psychology and teaching methodology. A worldwide trend, with Bulgaria being affected as well, has been observed over the last two decades of changes to the educational system such as increased administrative workload, no or little empowerment, or neglect of teachers' voices, which are perceived as adverse working conditions and affect teacher motivation, commitment and retention. Some researchers mention societal challenges and governmental pressure reflecting in greater job intensity and reduced teacher autonomy often resulting in lack of motivation and high levels of attrition (Down, 2009, Hargreaves 2009), while others focus on the characteristics of the new generations of learners with their ways of perceiving, communicating and learning that are quite different from those of previous generations or of teachers themselves.

The new developments in information and communication technologies mean that teachers have one more challenge to deal with as they need to allocate time for professional development related to the familiarisation with and use of modern technologies in the educational process. This poses a threat to teacher resilience as teachers have different personalities and different views of teaching and classroom interaction. Becoming more time-consuming means that the teaching profession is getting more emotionally demanding. This results in higher levels of burn-out and impossibility to or difficulty in keeping a healthy work-life balance (WLB). WLB is a source of support and resilience which is why if a teacher has less time for personal recovery, reflection and motivation, they can decide to leave their job and change their career path or reduce their effectiveness at work.

Another group of challenges or unfavourable circumstances includes teacher team relations, societal attitudes to the teaching profession, the quality and

quantity of the support received. Working in a team with people who do not have similar views on key issues, such as teaching methodology, attitude to novelties, peer communication, or professional development can result in threats to teacher resilience and well-being. Furthermore, societal misconceptions of the vocational nature of teaching and the underestimation of teachers' efforts to prepare the new generations for a meaningful future are a common cause for teacher attrition, burnout or fewer young people interested in becoming teachers – all of a future negative long-term effect. Thus the quality and quantity of the support teachers receive at institutional and social levels may be the point of no return for teaching experts of any age, which on the one hand can make young people choose a less stressful career or a career that is equally stressful, but more promising. On the other hand, experienced teachers may leave without handing over their valuable practice, advice and observations, thus providing no continuity in the field and affecting educational quality.

The advent of artificial intelligence (AI) is a risk factor that has recently become of interest to society, including educational professionals, parents, employers, learners. The massive introduction of intellectual products based on the implementation of AI is yet to be fully investigated and needs some time for observation. However, what has generally been articulated in terms of negative impact on young people and educational process is misunderstanding and misuse of artificial intelligence, meaning that it is not used as a valuable assistant, but as a servant. Learners do not gain knowledge or skills, but rely on AI platforms and tools to write their homework or cheat at tests and exams, while teachers exploit similar instruments to do their job, such as preparing assignments or checking tests, instead of doing this themselves because of greater administrative workload or lack of adequate appreciation of their efforts by society.

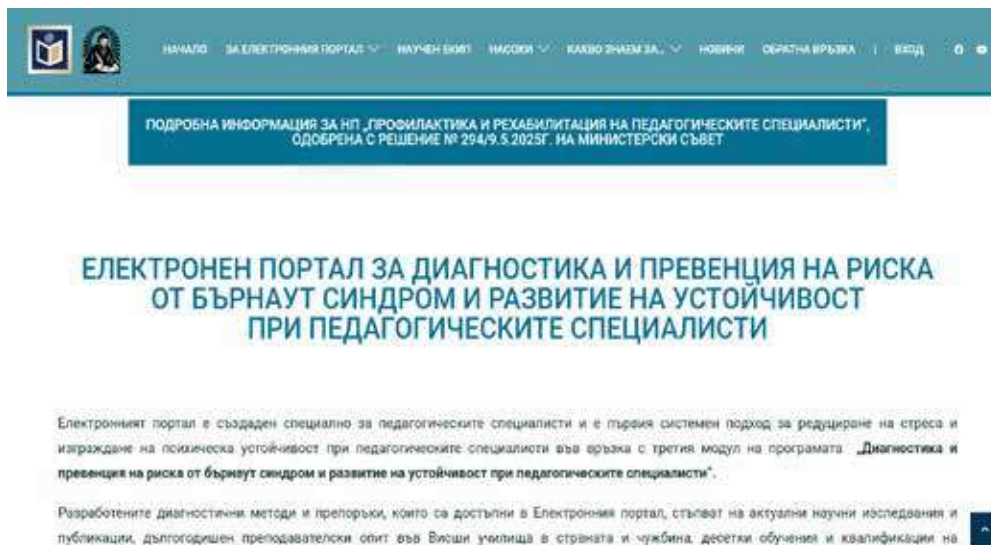
The majority of challenges researchers are faced with are related to responsiveness. In order to collect data, they have to survey as many teachers as possible emailing questionnaires, organising interviews, discussions and observations. Unfortunately, the percentage of those who refuse to participate is high thus resulting in the missed opportunity to have larger samples and greater survey representativeness. Another issue is academic rivalry at individual and institutional levels leading to negative effects in terms of contribution to scientific activity. Furthermore, Bulgarian scholars cannot afford to pay for access to research works and making efforts to contact authors with requests for free access to their publications is time-consuming and sometimes frustrating, especially in the cases of refusal or unsuccessful communication. Being unable to familiarise with scientific trends or seminal works prevents a researcher from in-depth analysis and penetrating insights into the matter of particular scientific interest, including TR.

Previous research on teacher resilience in Bulgaria

In Bulgaria, research on teacher resilience is scarce. Three works on the problem were identified – a web portal, research on the work-life balance of university lecturers during the pandemic, and a survey of school teachers' resilience. The survey of school teachers' resilience was conducted by one of the Bulgarian trade unions – trade union “Education” within Podkrepa Trade Union under an EU project (Sindikát Obrazovanie Podkrepa, Erasmus+, KA226 – Strategic partnerships to promote readiness for digital education, Project n° 2020-1-BG01-KA226-SCH-094958 Teacher Resilience – BEST). No data about it could be found despite the efforts made to obtain information. However, detailed description of the web portal was provided by Pavlov, Naneva and Yanakiev (Pavlov, Naneva and Yanakiev, 2024). The researchers work at Plovdiv University in Bulgaria and focused their scientific efforts on the development of a web portal for stress and burnout resilience assessment for school teachers in Bulgaria because there are approximately 50 000 pre-school and school teachers in the country who are exposed to stress at work. This stress accumulates and some experts reach the point of professional burnout when they need psychological support and assistance. In order to be efficient in the provision of this assistance and support, all stakeholders need to know about each case – individual's personality, experience, age, professional context, situation, level of stress. Thus the development of an instrument scaling stress and assessing resilience is expected to help in designing solutions leading to teacher retention and enhanced resilience.

According to the scholars:

“the StressPortal was created for pedagogical specialists and is the first systematic approach to reducing stress and building psychological resilience in education professionals in connection with the third stage of the programme of the Ministry of Education and Science “Diagnosis and prevention of the risk of burnout syndrome and development of resilience in pedagogical specialists”. It is a set of two interconnected independent products, such as a specialised site with information sections and a testing module application, displaying a result based on the personally entered anonymous answers of each user.” (Pavlov, Naneva and Yanakiev, 2024, pp. 167-168).



Source: Plovdiv University Web Portal.

Figure 5: Web Portal developed by Plovdiv University faculty members

The portal was designed as an informative website that offers extensive information about stress, burnout and resilience under different sections, and includes over thirty recommendations for stress reduction. The testing application contains a questionnaire facilitating the assessment of the levels of stress and resilience. Data are anonymised, but there is an algorithm preventing multiple responses by the same user and providing for meaningful research of the issue. Furthermore, the application is a standalone one. It does not depend on external processes and contains a stress thermometer that allows scalability. Thus teachers who feel under pressure, stressed, frustrated or demotivated can fill in the questionnaire and see what their level of stress is, as well as find support based on the information and recommendations given.

The application navigation is easy. There are two possible scenarios. One of them involves self-evaluation and the use of the stress thermometer which shows the respondent's stress level on a colour scale and with a description. Hence the respondent learns about their stress situation in an informative way providing for reflection. The second scenario includes test questionnaires with multiple answers and in the end the results are given along with individual recommendations on coping with the problematic situation. These recommendations are focused on three main areas of impact – changing habits, working on improving family relationships and communication, and fostering an educational environment that

is relaxed and positive. By the time of the paper publication, the StressPortal had been visited by 6300 respondents of whom 3910 had filled in valid questionnaires, which means that along with a solid database for research, an impressive number of teachers had the opportunity to check their stress level and receive professional advice on stress and burnout prevention.

The research on the work-life balance of university lecturers during the pandemic was conducted by Bakracheva et al. (2024) and thus focused on faculty resilience by studying the impact of teleworking during the pandemic on lecturers' psychological and mental health; levels of burnout, perceived stress and job satisfaction; personal relations, work-life balance and overall satisfaction. The scholars carried out a survey that involved a sample of 708 respondents from HEIs in Bulgaria and the questionnaire dissemination was supported by the Bulgarian Ministry of Education and Science. The questionnaire through which data were collected was designed by the researchers and the measurement scales included the Perceived Stress Scale (Gregory & Milner, 2009) – 10 items with a five-point scale; the Health Status Scale (PROMIS) – a nine-item scale developed by Hays et al. (2009) to measure the subjective assessment of health focusing on its components (fatigue, perceived pain, mental and physical health); the Psychosomatic Symptoms Scale (Bakracheva et al., 2022) with a five-point response scale; the Professional Burnout Scale (BST, 2022) adapted for the specific study and aimed at collecting data related to emotional exhaustion, depersonalisation and personal accomplishment through corresponding subscales and with 22 items included; the Job Satisfaction Scale – authors' adapted version of several tests (Spector PE, 1985; JSS, 2022; TJSS, 2015), with 15 items on it based on a five-point response scale, intended to gather information related to the respondent's relations with colleagues, satisfaction with various job-related aspects, such as pay, management, workload; a Fears and Anxiety Scale (Bakracheva et al., 2022) with 6 items on financial matters, general insecurity and health; a Work-Life Balance Scale – including seven items with a five-point response scale (Bakracheva et al., 2022); a Relations Scale (Bakracheva et al., 2022) – a four-item scale with a five-point response scale aimed at measuring the evaluation of the relations with colleagues and supervisors, as well as personal relations.

The research team found that the positive relations with colleagues and managers are of considerable importance for the maintenance of a good work-life balance as respondents perceive interpersonal relations at work and in personal life as crucial. Another finding that is worth mentioning is the fact that occupational factors, such as emotional fatigue, stress and externalised psychosomatic factors, affect work-life balance and indicate that relevant support should be given in order to keep the balance and prevent faculty from professional burnout duly.

The overall results of the survey revealed high levels of teacher resilience of university lecturers with levels of stress, burnout and dissatisfaction below or just above the theoretical mean. No significant importance is established in terms of respondent age, gender, experience, university location or academic area. It is noteworthy, though, that respondents feel their work-life balanced was challenged during the pandemic and the levels of emotional exhaustion and worsened physical health are perceived as high.

Survey on teacher resilience in the Bulgarian tertiary sector

To study the teacher resilience in Bulgarian higher education institutions (HEIS) the Mansfield-Wosnitza questionnaire 1.5 (2015) based on the MTRS was used. The reason to make this decision is the fact that globally more and more scholars are applying it in the assessment and measurement of TR in educational sectors and countries, which facilitates comparative studies and provides for theoretical implications.

The author's original idea was to investigate the whole tertiary sector in Bulgaria by sending emails to all faculty staff. In Bulgaria, there are 52 HEIs, both public and private. They have different profiles and sizes and a large sample would have resulted in greater representation. However, due to technical reasons, such as no access to individual staff emails on university websites, it turned out to be difficult and time-consuming to realise the initial plan, which is why the sample included the faculty of eleven Bulgarian universities. The response rate was not as high as expected, but still a large one – 582 respondents.

Even though the data is being processed statistically, it is possible to present and discuss some interesting findings from the initial data processing stage. Table 1 shows the dimensional split of the questions in the questionnaire. Altogether, the questionnaire contains 34 items, of which 29 items related to resilience factors and 5 questions aimed at collecting demographic data like age, experience, gender, other jobs before starting a teaching career, university affiliation.

Table 1: Questionnaire with dimensional breakdown

Professional	Emotional	Motivational	Social
<p>1. At school, I can be flexible when situations change.</p> <p>2. I can quickly adapt to new situations at school.</p> <p>3. I am well organised in my school work.</p> <p>4. I reflect on my teaching and learning to make future plans.</p> <p>23. In my role as a teacher, I am a good communicator.</p> <p>25. At work, I can view situations from other people's perspectives.</p>	<p>5. When something goes wrong at school, I don't take it too personally.</p> <p>6. After reflection, I can usually find the funny side of challenging school situations.</p> <p>7. When I feel upset or angry at school, I can manage to stay calm.</p> <p>8. I balance my role as a teacher with other dimensions in my life.</p>	<p>9. I am generally optimistic at school.</p> <p>10. At school, I focus on building my strengths more than focusing on my limitations.</p> <p>11. When I make mistakes at school, I see these as learning opportunities.</p> <p>12. In my role as a teacher, I set goals and work towards achieving them.</p> <p>13. I have realistic expectations of myself as a teacher.</p> <p>14. I believe that if I put my mind to something at school I can be successful.</p> <p>15. I am good at maintaining my motivation and enthusiasm when things get challenging at school.</p> <p>16. I enjoy learning when I am at work.</p> <p>17. I like challenges in my work.</p> <p>18. I am persistent in my work.</p> <p>19. I believe that I have control over my work life.</p> <p>20. It's important to me that I put in effort to do my job well.</p>	<p>21. When I am unsure of something, I seek help from colleagues.</p> <p>22. I am good at building relationships in new school environments.</p> <p>24. In my work, I can look at a situation a number of ways to find a solution.</p> <p>26. When I am at work, I can generally resolve conflicts with others.</p> <p>27. When I am at work, I can generally resolve conflicts with other teachers.</p> <p>28. When I am at work, I can generally resolve conflicts with students.</p> <p>29. When I am at work, I can generally resolve conflicts with administrators.</p>

Source: Author's own research

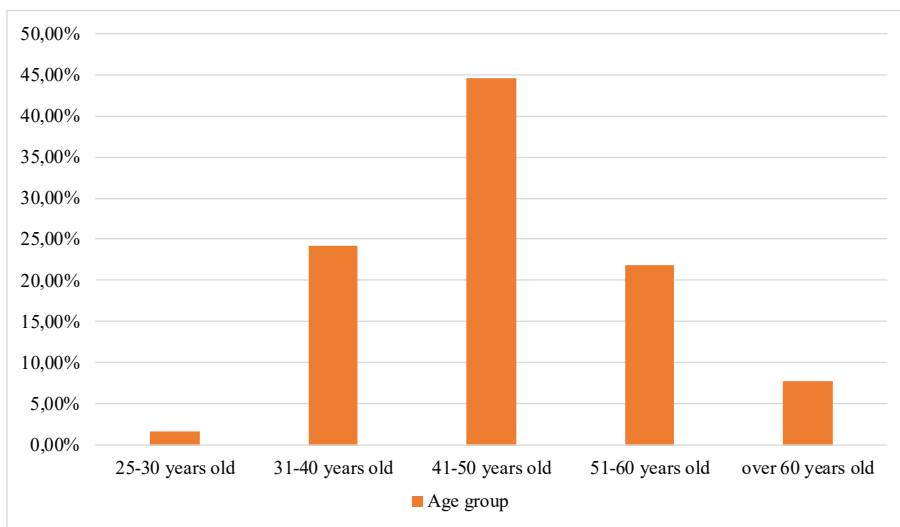
Table 2: Affiliation of faculty respondents

University (11)	Number of participants (582)
University of National and World Economy (UNWE), Sofia	128
Sofia University “St. Kliment Ohridski” (SU), Sofia	168
Veliko Tarnovo University (VTU), Veliko Tarnovo	80
Konstantin Preslavski University of Shumen (ShU), Shumen	42
Trakia University (TU), Stara Zagora	7
Paisii Hilendarski University of Plovdiv (PU), Plovdiv	64
Medical University – Pleven (MUP), Pleven	22
Burgas State University “Prof. Dr. Assen Zlatarov” (BSU), Burgas	10
Varna Free University “Chernorizets Hrabar” (VFU), Varna	8
University of Economics – Varna (UEA), Varna	47
South-West University (SWU), Blagoevgrad	6

Source: Author’s own research

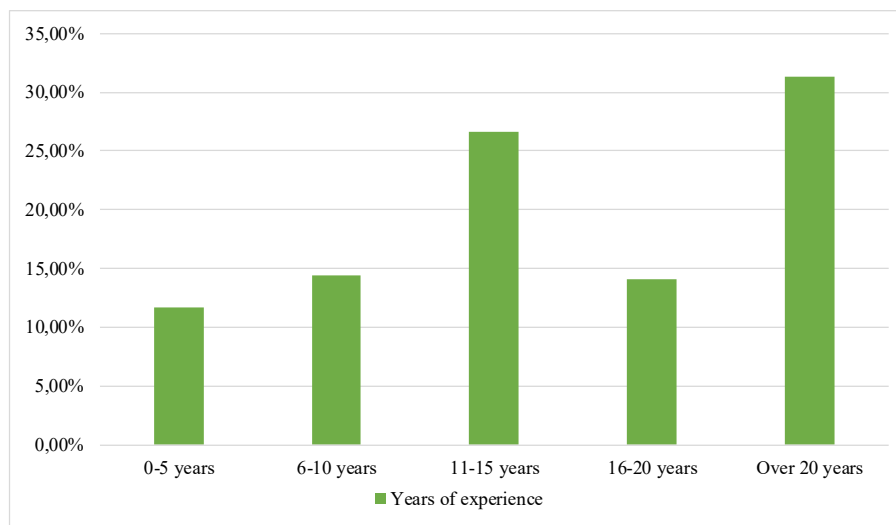
Table 2 clearly shows that of the universities contacted some were more responsive than others. As the respondents from the university the author works for (UNWE) were the group whose data was processed first, the focus of this paper is on these initial results.

Demographics of the UNWE respondents



Source: Author's own research

Figure 6: Respondents' age



Source: Author's own research

Figure 7: Respondents' teaching experience

Initial findings

Results show that Bulgarian faculty have a high level of resilience with the four dimensions revealing stamina, self-efficacy, effectiveness, flexibility. In terms of respondents' demographics, it was found out that women (74 respondents or 58%) are more responsive than men (54 respondents or 42%). Most respondents are middle-aged and very experienced, and the large majority of them (85.9%) have had another job before they chose to teach. The final results from the statistical analysis will indicate whether there are correlations between respondents' age, experience, gender, previous job experience in another field, and the factors of resilience, but at this stage it could be assumed that age, experience and previous experience in another field contribute positively to teacher resilience. This is more clearly observed in the professional and emotional dimensions, while there are more challenges in the emotional and motivational ones.

There are interesting findings with regard to the answers to some of the questions in three dimensions – emotional, social and motivational. They may be interpreted as a source of stress or risk, but also as an opportunity for personal and professional growth and thus for accomplishment and enhanced resilience if efforts are made in this direction. The table below shows the responses that are worth discussing.

In the emotional dimension, the results for **Question 5** indicate a substantial percentage of hesitation and disagreement, which exceeds the one of agreement. Why is a respondent hesitant or negative: is it because they do not feel they are good at emotional management or is it because they do not feel commitment and engagement? This question is reasonable with regard to teacher well-being. **Question 6** is related to the sense of humour as a factor building and enhancing resilience. The majority of the respondents demonstrate a sense of humour and control of challenging situations, however a third of them is hesitant. If a teacher believes that teaching is their vocation and cannot see the funny side of a problem, then do they remain resilient and at what cost? Another relevant point to consider is what comes after a problem has been approached with fun – does it result in bouncing back or in feeling pessimistic and frustrated? In the case with the latter and after accumulation, the result might be attrition and leaving the profession.

In terms of the social dimension (**Q 26-29**), it is noteworthy that overall respondents feel confident about their capacity to deal with conflicts (85% agree or strongly agree). However, the percentage of agreement decreases with hierarchy – respondents feel most successful in tackling conflicts with students (93,7%), less successful in tackling conflicts with teachers (peers) – 82.1 % and least confident when it comes to resolving conflicts with administrators – 79.7 %, although the positive results for all three groups of conflicts are very high. At the same time, hesitation about the successful management of conflicts increases with hierarchy,

thus starting from 4.7% for conflicts with students, rising to 17.2% for conflicts with teachers and reaching 18% for conflicts with administrators. Therefore, an institutional environment with supportive management is beneficial and can lead to strengthened resilience, whereas challenging situations with administrators or lack of support in critical circumstances might result in negative effects on resilience. In addition, the percentage of teachers who are hesitant about asking for help from colleagues (Q21) accounts for almost a fifth of the total number of respondents and prompts for consideration as the teaching profession is one related to the ability to work in teams of various configurations in order to accomplish the teaching mission.

Table 3: Initial results to consider

Dimension and question		Result
1		2
Emotional	Q5: When something goes wrong at school, I don't take it too personally.	Strongly agree 9.4 %; Agree 28.9%; Neither agree nor disagree 37.5%; Disagree 20.3%; Strongly disagree 3.9%
	Q6: After reflection, I can usually find the funny side of challenging school situations.	Strongly agree 11.7%; Agree 43%; Neither agree nor disagree 32%; Disagree 11.7%; Strongly disagree 1.6%
Social	Q21: When I am unsure of something, I seek help from colleagues.	Strongly agree 23.4%; Agree 51.6%; Neither agree nor disagree 18.8%; Disagree 5.5%; Strongly disagree 0.8%
	Q26: When I am at work, I can generally resolve conflicts with others.	Strongly agree 21.9%; Agree 63.3%; Neither agree nor disagree 14.1%; Disagree 0.8%; Strongly disagree 0%.
	Q27: other teachers: When I am at work, I can generally resolve conflicts with other teachers.	Strongly agree 22.7%; Agree 59.4%; Neither agree nor disagree 17.2%; Disagree 0.8%; Strongly disagree 0%.
	Q28: students: When I am at work, I can generally resolve conflicts with students.	Strongly agree 32%; Agree 61.7%; Neither agree nor disagree 4.7%; Disagree 0.8%; Strongly disagree 0.8%
	Q29: admins: When I am at work, I can generally resolve conflicts with administrators.	Strongly agree 18.8%; Agree 60.9%; Neither agree nor disagree 18%; Disagree 2.3%; Strongly disagree 0%.

Continued

1		2
Motivational	Q11: When I make mistakes at school, I see these as learning opportunities.	Strongly agree 17.2%; Agree 50%; Neither agree nor disagree 23.4%; Disagree 8.6%; Strongly disagree 0.8%
	Q15: I am good at maintaining my motivation and enthusiasm when things get challenging at school.	Strongly agree 23.4%; Agree 56.3%; Neither agree nor disagree 18%; Disagree 2.3%; Strongly disagree 0%.
	Q17: I like challenges in my work.	Strongly agree 22.7%; Agree 43.8%; Neither agree nor disagree 27.3%; Disagree 3.9%; Strongly disagree 2.3%

Source: Author’s own research

With regard to the motivational dimension (**Q 11, 15, 17**), respondents demonstrate a high level of enthusiasm and motivation. It should be noted, though, that there is almost a quarter of hesitant teachers when it comes to processing difficulties in a positive way and elaboration is needed as to what causes it.

The results for the variables in the professional dimension indicate highly resilient respondents and there are no specific findings at this stage.

Implications

Regardless of the fact that the survey data are still being processed and analysed, there are several implications of global significance. Given the findings considered above in terms of three dimensions, further research could focus on collecting specific information elucidating the discussed results, as well as other results of particular interest to scholars, academic and educational management or other stakeholders. For instance, it is worth investigating the relation between previous job experience in fields other than teaching, vocational commitment, professional educational background, continuous professional development. Another issue requiring attention and contributing to resilience is the study of the relation between teachers as leaders, teachers as team players in different configurations (as it is in the case with the social dimension) and teacher resilience. A research focus on academic faculty perceptions of their resilience with key issues, topical problems, failures, level and type of support shared in the form of interviews could add value to TR measurement and assessment based on the one used in this study as it would provide for a thorough and very detailed

analysis of the current perceptions of teacher resilience and the approaches to its building and maintaining.

Conclusion

The extensive literature survey and the study conducted for the Bulgarian tertiary sector show that teacher resilience is an issue of significant impact for society and the college. The research on teacher resilience in Bulgaria is scant and no work on the resilience of university lecturers has been found. Therefore, the survey of faculty staff presented in this study bridges a gap between theory and practice by providing for theoretical developments and further empirical efforts. Additionally, it can be used for comparative studies, special research focus on particular dimensions or issues, as well as for improvements in TR assessment.

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