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Gender Differences and Stereotypes in Teacher Resilience Research

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Abstract

In the present study, the issues of teacher resilience and the persistent gender stereotypes in the field are discussed. The main objective of the conducted research study was to examine the presence of gender-stereotype-confirming behavior in coping with adversity in vocational school teachers. The Connor-Davidson Resilience Scale CDRISC-25^{SLOVAK} was selected as the most suitable research instrument, by means of which gender differences in the participants' (N=474) responses in its subscales were studied. The results obtained confirmed the hypothesis presuming the existence of gender differences in the achieved scores in five of the seven dimensions of the scale, and also stereotype-confirming behaviors—according to which men are rational problem solvers while women tend to apply emotion-focused coping strategies—were reported. This knowledge can be the first step towards introducing measures with the aim to provide individuals of all genders with opportunities to broaden their scale of coping strategies and promote resilience in them. Since vocational school teachers are on the periphery of researchers' interest and no available extensive study has been focused on gender differences in teacher resilience, the research findings aim to fill the gap in the existing knowledge, provide unique data for policymakers, and create a basis for further resilience research.

Keywords:

Resilience;
Vocational School Teachers;
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1- Introduction

It is generally accepted that working with people brings about a whole range of demanding situations, including interpersonal conflicts of various intensity. This kind of stress often occurs as part of teachers' professional lives, as teachers are in close contact with their students, colleagues, and school leaders, but also with the parents of the students, whose expectations are not rarely unrealistic. They often work under pressure since they need to meet the requirements placed on them by all stakeholders, by the national and school curriculum, and to achieve a positive change in all students, including those with special educational needs. In this context, teacher resilience and its development are undoubtedly a necessity. Similarly to other fields of human activities, gender stereotypes revolving around societal expectations are present in this field, too. These can be limiting and harmful from the perspective of building resilience. It is important to emphasize that resilience is independent of gender, and teachers can only benefit from developing their coping strategies.

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The present study builds on previously published research activities in the field of teacher resilience, examining the existence of associations between teachers' levels of resilience and their teaching experience [1]. In the present study, an investigation into the presence or absence of gender-specific behaviors that can confirm or deny the existing stereotypes in the field of resilience is presented. The study makes novel contributions to teacher resilience research as it aims to fill the gap in the current knowledge about gender differences in the context of teacher resilience, as well as to confirm or deny the truth behind the persistent stereotypes. Following a thorough literature review on teacher stress and teacher resilience, it can be stated that no study specifically focused on gender stereotype-confirming behaviors in teachers in the process of dealing with occupational stress has been published.

1-1- Teacher Stress

The WHO's [2] definition of stress characterizes it as a "state of worry or mental tension caused by a difficult situation". It is a natural part of everyday lives caused by increased demands on the adaptive capacity of individuals [3]. Occupational stress can be observed in the context of a specific profession mainly (but not exclusively) on the job; for example, teacher stress is associated with the teaching profession and the school environment when a certain degree of inconsistency between external requirements and expectations and real educational contexts occurs and when this is beyond the adaptive capacity of teachers [4]. Teacher stress is a phenomenon that influences teacher motivation, selection of activities in the classroom, and, subsequently, also the quality of both teachers' and students' performance. According to Montgomery's [5] findings, teacher stress exceeding teachers' limits in combination with inadequately developed or inappropriate coping strategies can lead to anxiety, low self-efficacy, depression, and burnout, but can also be reflected in classroom management issues, students' underachievement, problems with building relationships, and interpersonal communication [6].

As defined by Prilleltensky et al. [7], teacher stress can be characterized as an imbalance between the occurring risk factors when performing job-related tasks and activities on the one hand and the available protective factors on the other. This can result in negative physical and/or psychological responses in various contexts.

There is a broad scale of extensive research studies investigating the sources of teacher stress. Typically, three stressful contexts are identified (e.g., by Kyriacou [8]): 1. stress associated with specific requirements and conditions in the school environment; 2. stress as a reaction to pedagogical situations subjectively interpreted as demanding; and 3. stress caused by the conflict between resources available to teachers and the risk factors that occur. Hennig and Keller [9] distinguish between four sources of occupational stress: 1. psychological—events or situations subjectively perceived as demanding; 2. physical—health condition and lifestyle; 3. institutional—e.g., physical and social environments, workload, autonomy, opportunities for career advancement and professional development; and 4. social—social background, family, social status, media, etc. In other studies, more detailed classifications of risk factors occurring in the teaching profession can be found. Průcha et al. [10] mention the following frequently observed sources of stress: 1. negative attitudes towards learning observed in students; 2. behavior problems of varying intensity; 3. frequent curricular changes; 4. implementation of organizational changes; 5. quality of work conditions; 6. opportunities for career advancement; 7. heavy workload; 8. interpersonal conflicts between staff members; and 9. lack of recognition. Among phenomena that can function as potential risk factors in the context of schools, school ethos, role ambiguity, conflicting roles, lack of autonomy [11], remuneration not reflecting teachers' efforts [12-14], managerial stress (classroom management), problems with synchronizing teachers' private and professional lives, etc. can be included (see also Richardsen &Matthiesen [15]).

Research evidence shows that teacher stress is perceived as a serious issue by teachers [16] not only from the aspect of their job performance, but its presence at the workplace can influence their decision to leave the school system and change careers. This was confirmed by Ingersoll's [17] research study, the findings of which show that workplace stress is one of the most significant reasons for changing professions in teachers with no more than 10 years of professional experience. It is alarming in the current situation, when there is a shortage of qualified teachers not only in the Slovak Republic. Therefore, it is important to take measures and introduce targeted programs focusing on promoting and developing teacher resilience.

1-2- Teacher Resilience

Resilience is a complex phenomenon that points to the indicators of life adaptation, which can also be applied to individuals' professional lives. Teacher resilience is among the determinants of teachers' professional lives since it can be crucial from the aspect of their professional failure or success. It can also be assumed that resilience and the ability to opt for appropriate coping strategies [18] influence teachers' career paths to a great extent and undoubtedly contribute to their decision about changing profession, changing school, or staying at their current workplace.

There is also a solid body of research confirming the existence of a relationship between individual teachers' resilience levels and their performance, their job (dis)satisfaction, and self-efficacy [19]. In Pretsch et al. [20], Kärner et al.'s [21], or Chen's [22] research studies, positive correlations were found between teachers' resilience and their job satisfaction.

Teacher resilience is influenced by a broad scale of factors, which can be classified into: 1. internal factors and 2. external factors. Although internal factors include personality traits (optimism, enthusiasm, altruism, emotional stability, etc.), available coping strategies, teaching skills and competencies, social skills and competencies, etc., external factors can be found in teachers' environments, mainly at the workplace, e.g., receiving support from the school leader, the availability of close contacts with peers, colleagues, a mentor, family, and friends. If these factors are present in the lives of teachers, they can play the role of protective factors [23], while a lack of them can function as a risk factor. Both categories of protective factors are important from the aspect of overcoming adversity, and therefore, as pointed out by Ainsworth and Oldfield [24], in the context of developing teacher resilience, creating favorable conditions and work environments in schools is a necessity. Similarly, Bagdžiūnienė et al.'s [25] research study revealed that workplace characteristics as subjectively perceived by teachers predict the level of their resilience.

Among external protective factors, also positive school culture, supportive school management, positive relationships and interactions at the workplace based on mutual communication between all stakeholders and collaboration between teachers, as well as a reasonable workload, are included. These external (or also ecological) factors that promote teachers' ability to adapt to changes and adversity have been addressed by several authors, e.g. Day [26] focused on school culture, Johnson et al. [27] on teachers' participation in decision-making, Cameron &Lovett [28] dealt with the impact of the quality of relationships between school leaders and teachers, and Brunetti [29] investigated the role of mentoring relationships and mutual support. In all of these studies, the existence of positive associations was confirmed.

Clarà [30] uses a relatively simple definition of teacher resilience and describes it as a process of positive adaptation when dealing with demanding situations. Gu & Day [31] apply a different approach, defining teacher resilience as teachers' capacity or ability to handle the level of uncertainty they struggle with in schools and maintain focus, balance, and a sense of duty. Resilience is not an innate and static characteristic that cannot be changed. As pointed out by Gu [32], teacher resilience develops in a dynamic process. Mansfield et al. [33] go even further in their definition; according to them, resilience is more an output than an ability or a process.

According to Kärner et al. [21], resilience can be developed, and therefore they use the notion "resilience competencies", which they characterize as a three-dimensional concept: 1. flexibility (adaptation); 2. dynamics (reaction to changes); and 3. resistance (quick recovery), and similarly to Gu and Day [28], perceive them as individuals' ability to meet the requirements associated with performing a job and to maintain health.

In accordance with the above-mentioned characteristics, it can be claimed that teacher resilience represents a progressive competence that helps individuals maintain their mental health and more or less normal functioning despite adversity and challenges in their lives [1]. According to Drew and Sosnowski [19], there are three basic characteristics that distinguish resilient teachers from their less resilient colleagues:

- Their rootedness in the school community, which makes it easier for them to appropriately react to the permanently changing conditions, to adapt and respond to new challenges. They can better face adversity and take advantage of the available protective factors.
- Their ability to overcome uncertainty and apply a positive approach, which means that they see adversity as a challenge or an opportunity to learn.
- Their ability to take advantage of their relationships with school community members (school leaders, colleagues, students, etc.).

Another characteristic feature of resilient teachers is that they are able to choose appropriate coping strategies that are effective in a particular situation, which reduces anxiety and contributes to their well-being [34]. Therefore, it is important to provide training programs for teachers developing their resilience and support them in the process of dealing with adversity [35].

1-3- Teacher Resilience and Well-Being

In schools, being complex organizations [18, 36], there are increased demands on teachers who have to meet the requirements placed on them by school leaders, their colleagues, students, their parents, and other members of the school community, but also the school environment. As pointed out by Mansfield et al. [33], resilient teachers can face challenges more easily than their less resilient colleagues and are more likely to achieve job satisfaction, which contributes to teachers' well-being. Research results in the field of teacher well-being indicate that teacher resilience contributes to burn-out prevention and stress reduction [37, 38], but is also important in the context of maintaining mental health [39, 40]. Well-being can be defined as a positive evaluation of the work environment in combination with healthy functioning in it [41, 42]. It is related to such phenomena as job satisfaction or attachment to the organization. According to Zelina [43], it can be characterized by positive emotional experiences, positive personality traits, and optimistic attitudes. In accordance with the above, it can be stated that resilient teachers are more resistant to harsh circumstances that evoke negative emotions in the classroom, and there is a decreased probability of psychopathological

symptoms in them than in their less resilient colleagues. This is also supported by some of Burić et al.'s [44] findings. Zhang et al. [45] investigated the influence of special needs teachers' resilience on their mental health and also studied the association between school climate and teacher well-being [46]. Their results confirmed the existence of associations between these variables. Uzar-Ozcetin et al. [47] found out in a sample of Turkish teachers educating Syrian refugees that higher levels of resilience promote intercultural sensitivity and empathy in teachers.

1-4- Lived-In Teacher Resilience

The notion "lived-in resilience" was introduced by Boon [18], who defines it as individuals' functioning in their professional or personal lives that is determined by factors having an impact on individuals' well-being or ability to adapt. In the case of teachers, lived-in resilience is composed of: 1. physical or psychological resilience; and 2. teacher resilience. Teacher resilience is closely associated with phenomena such as teachers' job satisfaction, their commitment, teacher efficacy, effectiveness, and motivation. Teacher resilience is also impacted by the school environment, i.e., a positive school climate and its development are important from the point of view of the quality and success of teaching activities since teachers must face a whole range of stressors in schools.

1-5- Purpose of the Study

Resilience research has focused on a variety of target groups. In education, most studies have been targeted on children and youth [48–65]. Furthermore, although a number of extensive research studies on the levels of teacher resilience have been conducted, a thorough literature review showed that the group of vocational school teachers—even though they face some additional challenges when compared with other groups of teachers—and their levels of resilience are on the periphery of research interest. To fill this gap in available literature and gather data on this specific target group, resilience levels of vocational school teachers and the associations between them and selected variables have been studied within a grant project (No. IGA003DTI/2022—Vocational School Teachers' Resilience). The present research study aims to: 1. broaden the current knowledge in the area of teacher resilience by providing information on gender differences and the appearance of stereotype-confirming behaviors in the context of dealing with teacher stress; 2. in conjunction with other research activities, create a solid basis for designing training programs aimed at developing teachers' resilience; and 3. provide schools, their leaders, and teachers with information that supports them in creating positive and safe school environments where the occurrence of risk factors is reduced.

In this study, the presence of gender differences in the respondents' scores achieved in individual dimensions of CD-RISC-25^{SLOVAK} is examined. In the research hypothesis, statistically significant gender differences in the scores for individual subscales are presumed.

Categorizing the research sample according to gender is important from the perspective of achieving the established research goals as, in society, certain gender stereotypes associated with the applied coping strategies exist, according to which women are more emotional and perceive the quality of relationships more sensitively compared with men. In the presented part of the research project, the existence of such associations is examined.

It is important to critically examine gender stereotypes since these are often generalized or oversimplified assumptions or beliefs about the actions and behaviors of individuals, certain social expectations based on individuals' belonging to a certain group [66] that do not respect diversity, but on the other hand, they often contain grains of truth. In the context of teacher resilience, gender stereotypes are related to how teachers of different genders should respond to adversity or challenges in schools. Identification of stereotype-confirming behaviors is the first step towards introducing measures with the aim to provide individuals of all genders with opportunities to broaden the scale of their coping strategies and to promote resilience, well-being, and empowerment.

2- Methods

2-1- Research Tools

As a research instrument, the Connor-Davidson Resilience Scale (CD-RISC) was used. Compared with other available standardized research instruments, the compliance of the scale with the established objectives was considered. The existence of the Slovak-ready-to-use – version of the scale was another important factor to be taken into account. The scale measuring individuals' resilience levels was originally developed for adult samples, but it has been successfully used with a variety of age groups for a range of purposes. The questionnaire was administered online.

From among the three available versions of the scale—CD-RISC 25, CD-RISC 10, and CD-RISC 2—we opted for the Slovak version of the original 25-item scale. Since the scale is protected by copyright, the wording of individual items cannot be reproduced; only the scores for each dimension are analyzed.

The 25-item scale (CD-RISC-25) contains 5-point Likert scale items in which participants either respond to events or situations during the previous month or, if they do not have such an experience, indicate how they would react in a

similar situation. Each item is scored from 0 to 4 (0 – not true at all; 1 – rarely true; 2 – sometimes true; 3 – often true; and 4 – true nearly all of the time). The total scores for the scale range between 0 and 100, and the higher the score is achieved, the higher the particular respondent's resilience level is.

The Connor-Davidson Resilience Scale CD-RISC-25 contains seven dimensions: 1. Hardiness—not stopping trying in spite of harsh circumstances, belief in the ability to manage and control things that happen, tenacity, and endurance; 2. Coping—a dynamic process in which an individual intentionally manages adverse situations; 3. Adaptability/Flexibility: individuals' ability to maintain balance between their own needs and requirements placed on them in various spheres of life; 4. Meaningfulness/Purpose: a positive approach and proactive behaviors that promote individuals' adaptation to changing work environments, new conditions, and circumstances; 5. Optimism—a personality trait stable in time associated with a positive approach and motivation, which can also be characterized as positive attunement and anticipating success despite adversity; 6. Regulation of emotion and cognition—maintaining control over own emotions and cognition; individuals' ability to prevent anxiety and negative emotions; and 7. Self-Efficacy: trust in own abilities to overcome adversity and handle challenges.

Even though the scale's authors point out that, as for the achieved scores, differences according to the respondents' age and location can be observed [67], within the present study, available data from the USA [68] were used as a starting point. In the USA (n = 577), the average score was 82, and the scores for quartiles were identified as follows: Q1 = 0-73; Q2 = 74-82; Q3 = 83-90; and Q4 = 91-100. For comparison, available relevant European research findings are presented below; however, it is important to mention that not even the conditions in the mentioned countries are identical with the conditions in the Slovak Republic, which must be considered when interpreting the obtained data. Faria et al. [69] carried out research in Lisbon in a research sample consisting of 421 respondents, where the arithmetic mean was 73.4 (SD = 12.0). More recent data are available from Italy, where the CD-RISC 25 was used by Bonaccio et al. [70] on an extensive sample of 10,812 respondents older than 34 years of age from the southern part of Italy, where the calculated arithmetic mean was lower—66.7% (SD = 12.4). In Sweden, as presented by Velickovic et al. [71], 2,599 respondents aged between 45-75 years achieved an arithmetic mean of 68.8, and also available research findings from Cyprus [72] are interesting, where, during the COVID-19 pandemic, the arithmetic mean in the sample of 205 respondents was 89.0.

In the first phase of the research project, factor analysis was carried out to test the construct validity of CD-RISC-25^{SLOVAK} in a sample of Slovak vocational school teachers. The suitability of the gathered data for factor analysis was confirmed by the computed Kaiser-Meyer-Olkin value (0.785). The applied Barlett's test of sphericity ($\chi 2 = 0.794$, significance 0.000) confirmed the existence of inter-item correlations. 71.47% of the cumulative variance is explained by the seven extracted factors (see Table 1).

Table 1. CD-RISC-25^{SLOVAK} – Extracted Factors

	Eigenvalues	% of Variance	Cumulative %	Cronbach's α
Hardiness	6.012	12.864	12.864	0.742
Coping	5.243	10.537	32.038	0.803
Adaptability/Flexibility	2.976	8.638	40.676	0.732
Meaningfulness/Purpose	2.861	8.251	48.927	0.811
Optimism	2.784	7.983	56.910	0.895
Regulation of emotion and cognition	2.658	7.728	64.638	0.721
Self-efficacy	2.159	6.835	71.473	0.702

2-2- Research Sample

The research sample was composed of 474 respondents: 192 male teachers (40.51%) and 282 female teachers (59.49%), which is a satisfying ratio of male and female participants considering the fact that in the Slovak Republic, there is statistical evidence of more female than male teachers working in schools. A statistical analysis of the collected data confirmed the reliability and validity of the research instrument for the research sample.

The research was conducted in accordance with the principles enshrined in the Declaration of Helsinki. The involved teachers signed an informed consent and participated in the research activities voluntarily. The data obtained were anonymized. Before the realization of the research study, it was approved by the Board for Internal System of Quality Assurance of DTI University, Slovakia, according to the Code of Ethics of DTI University, Slovakia.

2-3- Research Procedures

The flowchart of the research methodology that was used to achieve the study's aims is shown in Figure 1.

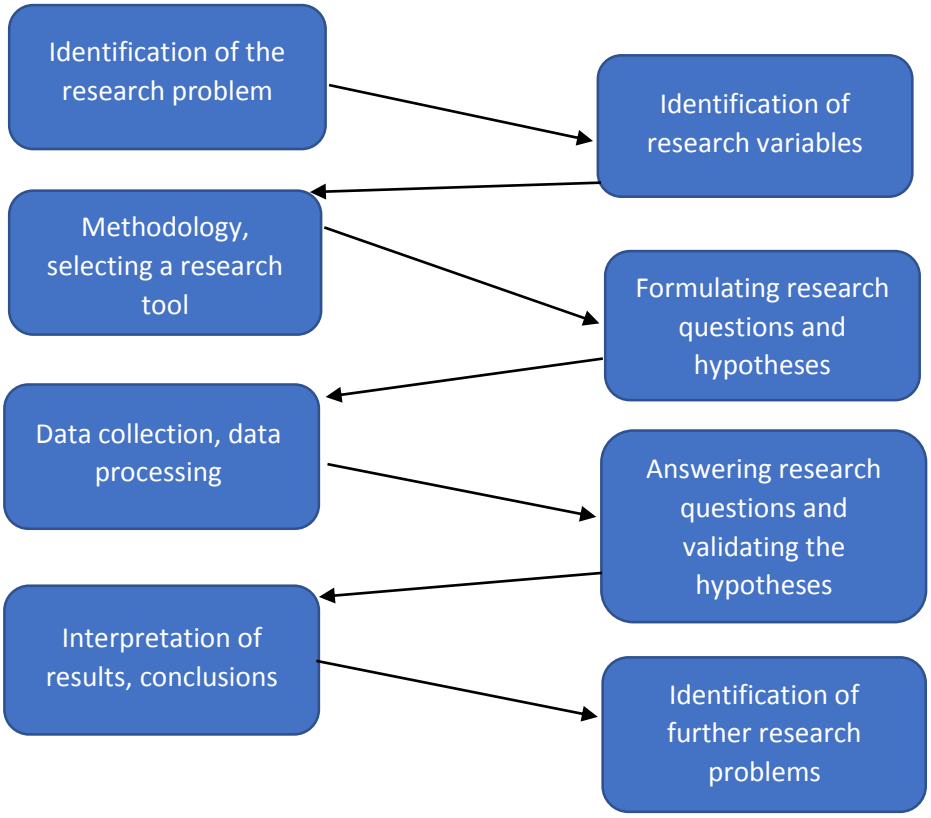

Figure 1. Research methodology

3- Results

In the research hypothesis, statistically significant gender differences in the subscales of CD-RISC-25^{SLOVAK} were presumed. First, Skewness and Kurtosis values for CD-RISC-25^{SLOVAK} (Table 2) were computed, and subsequently, one-way ANOVA and Tukey test for post hoc comparison of differences were applied.

Table 2. Skewness and Kurtosis Values

CD-RISC-25^{SLOVAK}	Hardiness	Coping	Adaptability/ Flexibility	Meaningfulness/ Purpose	Optimisms	Regulation of emotion & cognition	Self-Efficacy
Skewness	0.125	0.011	-0.149	-0.014	-0.231	-0.868	-0.647
Kurtosis	0.854	0.763	0.867	0.851	-0.635	-0.249	0.732

Normal distribution was verified by skewness and kurtosis. In Table 3, the calculated Fisher test values for differences between individual subscales according to gender are displayed.

Table 3. CD-RISC-25^{SLOVAK} – Differences between Subscales

Subscales	F-test	Significance
Hardiness	3.984	0.003
Coping	3.561	0.001
Adaptability/Flexibility	1.453	0.004
Meaningfulness/purpose	4.385	0.002
Optimism	5.986	0.008
Regulation of emotion and cognition	1.438	0.159
Self-Efficacy	1.267	0.248

Through the analysis carried out within the research study, the existence of statistically significant gender differences was confirmed in five of the seven subscales – Hardiness, Coping, Adaptability/Flexibility, Meaningfulness/Purpose, and Optimism. In the remaining two subscales – Regulation of Emotions and Cognition and Self-Efficacy – statistically significant gender differences were not found (see Table 4).

Table 4. CD-RISC-25^{SLOVAK} – Gender Differences According to Subscales

Gender	Value	H	C	A	M	O	R	S-E
Female	Mean	1.583	1.462	2.544	2.894	3.073	1.708	1.693
	Standard deviation	0.757	0.749	0.848	0.883	0.952	0.823	0.798
Male	Mean	2.563	2.716	1.567	1.468	1.641	1.679	1.725
	Standard deviation	0.878	0.867	0.753	0.761	0.754	0.756	0.826

Note: H – Hardiness; C – Coping; A – Adaptability/Flexibility; M – Meaningfulness/Purpose; O – Optimism; R – Regulation of emotion and cognition; S-E – Self-Efficacy.

The gender differences found for individual subscales are – for better visualisation – also displayed in Figure 2.

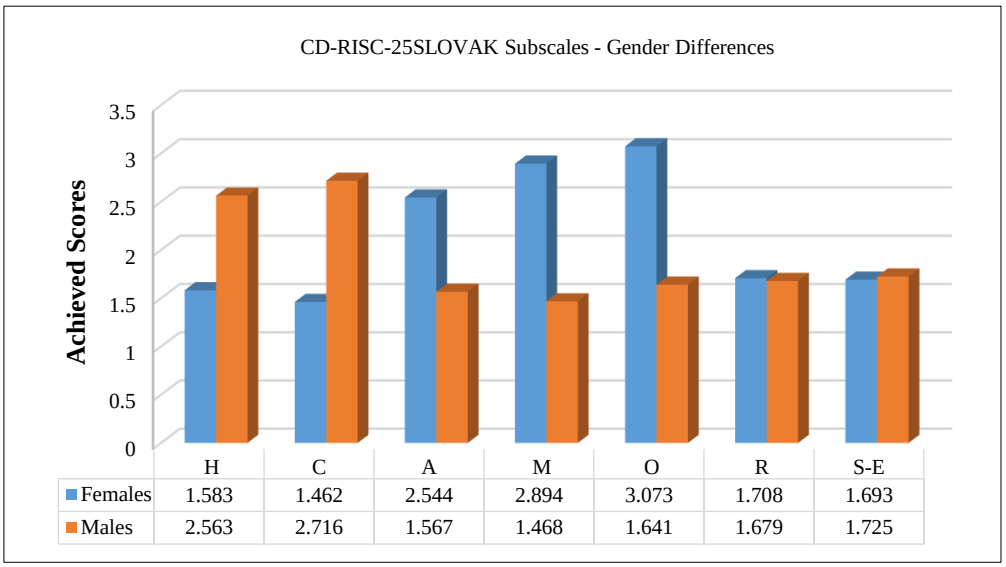

Figure 2. CD-RISC-25^{SLOVAK} – gender differences

4- Discussion

The main objective of the present research study was to investigate gender differences in the achieved scores in the dimensions of CD-RISC-25^{SLOVAK} and so to prove or disprove some of the persisting stereotypes reflected in the behavior and actions of the participants as reported by them. Stereotypes can be characterized as certain societal expectations that simplify complex experiences [66]. Gender stereotypes are also present in the context of teacher resilience, since male and female teachers are expected to approach problems differently. While men are generally considered strong, rational thinkers, unemotional, and are those who are expected to fix problems, women are perceived as vulnerable, emotional, and caring. Such stereotypes can be harmful as they put individuals under pressure and can also represent barriers to promoting social justice and equity, as well as a better understanding of human behavior. The data analysis carried out brought interesting results, which are in more detail discussed below.

4-1- Hardiness

In the subscale Hardiness, being a concept that is also related to a belief in own capacity to manage the environment, willingness to fight, and personal involvement, we detected higher scores in male respondents compared with female respondents, which is in compliance with our presumptions and the prevailing stereotypes in the field. In general, men are considered those who apply problem-focused coping strategies more frequently compared with women [73], they are perceived as rational problem-solvers, and they are generally assigned characteristics such as high work commitment, goal striving, or ability to influence the course of events [74]. On the other hand, in relation to women, there is prejudice that they are too emotional, dependent, and helpless, and therefore, they are expected to apply emotion-focused coping strategies in various situations more frequently.

In the present research study, male teachers felt more like active participants in the surrounding world than female teachers, and, alongside that, they believed that they could influence or even change it. Based on the obtained data, it can be assumed that in our research sample, men are “hardier” or more resistant to adversity than women in the sense that they perceive adversity as challenges that they face and are capable of meeting. Although our results are in line with other authors’ findings—e.g., Puri [75] found higher levels of hardiness in men compared with women in India—we must be careful when formulating conclusions, since such presumptions need to be confirmed by more extensive research, especially if also the research findings that do not confirm the existence of statistically significant differences between men and women are considered (e.g., Hystad [76]; Kaveh & Yazdi [77]).

4-2- Coping

Coping can be characterized as an adaptive force [78] that allows individuals to act and behave constructively even under harsh circumstances. According to Lazarus [79], coping is a conscious process, and it functions as a mediator between distress that occurs and individuals' responses to it. The availability of coping strategies is an important protective factor from the perspective of teachers' career paths as they experience high degrees of occupational stress [80]. Voitenko et al. [81] point out the importance of developing a flexible system of coping strategies, as there are no universal coping strategies that are efficient in all types of situations, and so they cannot be strictly categorized as effective or ineffective. The set of available coping strategies changes based on individuals' needs, experiences, and new challenges they must face.

There are three basic groups of coping strategies. Lazarus [82] distinguishes between two categories – problem and emotion-focused coping strategies – but there is also a third group – maladaptive coping strategies (escape reactions), which are not effective and can result in depression, anxiety, psychosomatic problems, etc. [13, 33].

As mentioned above, it is generally accepted that when adversity occurs, males prefer problem-focused coping strategies, while females tend to use emotion-focused coping strategies. Men are also expected to try to control their emotions and ensure no damage to their integrity or their relationships with their environments. Based on the fact that both in the personal and professional lives of individuals a wide range of problems and conflicts occur and dealing with them requires a broad scale of situational (either problem- or emotion-focused) coping strategies, it can be logically assumed that there are not any gender differences in the field of coping as such. Despite that – similarly to the subscale Hardiness – male respondents achieved statistically significantly higher scores than female respondents, which suggests that they can cope with demanding situations more easily. Similar findings are mentioned by Matud [83], who explains higher scores in men in the field of coping by the above mentioned stereotype, according to which men typically apply problem-focused coping strategies (see also Boczkowska et al. [84]), while women have a tendency to choose from the scale of emotion-focused strategies (see also Graves et al. [85]; Meléndez et al. [86]). The existence of gender differences in the selection of coping strategies was pointed out by Ptacek et al. [87], too. According to their results, women more frequently opt for emotion-focused coping strategies and are more willing to seek or accept social support than men who apply problem-focused coping strategies more frequently, but as for coping as such, no statistically significant gender differences were found.

In the context of choosing coping strategies, it is necessary to accentuate that there are factors that can have a positive impact on how individuals – equally men and women – handle stressful events or harsh circumstances, such as health condition (enough energy, a positive approach, sufficient knowledge, developed coping strategies, positive relationships and social interaction, or social background).

4-3- Adaptability/Flexibility

In the subscale Adaptability/Flexibility, as expected, higher scores were achieved by female teachers. This finding suggests that while men in general tend to adjust events and external conditions to their needs, women are more willing to adapt to changing circumstances. It can also be assumed that female teachers can better synchronize their needs with society's expectations, adapt their behavior, and develop attitudes that respond to the changes in their environments. This can lead to a better integration into work life, which is interesting in the context of Desrumaux et al.'s [88] findings, according to which satisfying teachers' needs has a mediating role between their resilience and job adjustment. A higher degree of adaptability to the conditions of the work environment in women was found by, e.g., Kulbaş & Kara [89], Ntarangwe et al. [90], Mondo et al. [91], etc. However, in the research study by Harry and Malepane [92] conducted in South Africa, men showed greater adaptability to working conditions than women.

4-4- Meaningfulness/Purpose

Similarly to the Adaptability/Flexibility subscale, in the case of Meaningfulness/Purpose, female teachers reported more positive and proactive behaviors, as well as an increased willingness to adapt their work environment when needed compared with their male colleagues. This finding cannot be considered surprising since these two dimensions are interconnected. The obtained results suggest that female teachers tend to compromise in terms of the content of their work and their preferences for particular tasks. They are more likely to negotiate about the content of their work or assign higher importance to their job related tasks, and so make them meaningful. Teachers who achieve higher scores in this dimension can also probably transfer their engagement to their colleagues in their close environments and tend to provide perspective to others. The above results are in line with the relevant findings of several international research studies (e.g., Dhanjal [93]).

4-5- Optimism

Optimism is related to an individual's expectation of positive outcomes in various situations. It is connected with a broad scale of health indicators. Research evidence shows that teachers with optimistic attunement report depression symptoms and physical symptoms less frequently, and they apply more effective coping strategies compared with their

less optimistic colleagues. For resilience research, optimism can be defined as a relatively stable personality trait over time. It is a one-dimensional cognitive construct associated with motivation to persevere and anticipation of success. These factors are crucial in the context of overcoming adversity that represents a barrier to achieving goals. If there is only little hope of success, teachers frequently give up. An optimistic orientation in this sense means that teachers expect good things to happen to them; they believe that they can modify the context and change bad things to better. In the subscale Optimism, female teachers achieved statistically significantly higher scores than male teachers, which corresponds to what Scheier et al. [94] claim—where problem-focused coping strategies are not functional, emotion-focused coping strategies can help—in the sense that using emotion-focused coping strategies requires a certain degree of optimism.

The research results confirmed the research hypothesis, presuming the presence of statistically significant gender differences in the calculated scores in the subscales of the Connor-Davidson Resilience Scale CD-RISC-25^{SLOVAK}. Moreover, also some gender stereotypes were confirmed in the case of our research sample. The main findings suggest that male teachers' belief that they can control the world around them and, so, can manage adversity better, is stronger than in female teachers. Therefore, it is not surprising that female teachers, as indicated in the questionnaire, are more likely to adapt to changing conditions and are more willing to compromise than male teachers. Female teachers also showed greater optimism about their expectations. The findings suggest that men and women involved in our research study approach problems differently, and also some stereotype-confirming behavior is present in their daily lives. Such findings could suggest that gender stereotypes are true, but based on the gathered data, it is not possible to draw any further conclusions on the key factors that influence the selection of their coping strategies, which is an implication for further research that can bring information on how gender can influence individuals' experiences and behavior and how interactions can promote empathy, cooperation, and more effective collaboration among teachers in schools.

The obtained findings also have implications for policymakers, as knowledge about persistent stereotypes and the existence of stereotype-confirming behavior in teachers can help address gender inequality. Gender stereotypes often reflect generally accepted societal norms and expectations, and research in the field can help mitigate their negative impact by introducing effective policies, programs, and interventions.

Building teacher resilience should start as early as during undergraduate teacher training, but it is a lifelong process. For both pre-service and in-service teachers, opportunities to develop diverse problem-solving strategies and to learn about various ways of approaching challenges should be provided. As confirmed by Pozo-Rico et al.'s [35] findings, teacher training programs can help broaden the scale of coping strategies in teachers. These programs should also address gender differences in coping with adversity and contain information on social and cultural phenomena, as well as gender stereotypes, which are limiting factors to the selection of coping strategies by individuals. Teacher training programs should promote the application of coping strategies according to teachers' personal strengths and preferences. Furthermore, teachers must be encouraged to express their emotions, and their emotional literacy should be intentionally developed.

5- Conclusion

The contribution of the present study can be seen from two aspects: 1. it brings data on the resilience of vocational school teachers, which is a group of teachers on the periphery of researchers' interest; and 2. it intends to prove or disprove the prevailing stereotypes regarding the existence of gender differences in handling demanding situations.

Within the presented research activities, gender differences in the participants' responses giving evidence of gender stereotype-confirming behavior were studied. Based on the obtained results, the existence of gender differences can be confirmed in five of the seven identified dimensions–Hardiness; Coping; Adaptability/Flexibility, Meaningfulness/Purpose, and Optimism–of The Connor-Davidson Resilience Scale CD-RISC-25^{SLOVAK}. In the remaining two subscales–Regulation of Emotions and Cognition and Self-Efficacy–no statistically significant gender differences were revealed.

In the five dimensions with statistically significant gender differences, some of the persisting stereotypes were proven. For example, as expected, male teachers—who are generally considered rational problem-solvers using problem-focused coping strategies, even though there is a broad scale of situations where emotion-focused strategies could be more effective—achieved higher scores in the dimensions of difficulty and coping. On the other hand, as was presumed, female teachers achieved higher scores in the dimensions Adaptability/Flexibility, Meaningfulness/Purpose, and Optimism. Regardless of the revealed differences within the sample, it is important to develop teachers' resilience and provide them with opportunities to broaden their scale of available coping strategies both within pre-service and in-service teaching programs, as well as with professional guidance and counseling.

Although there are certain limits of the conducted research study—the sample's composition and size—and the obtained results cannot be generalized to the entire population of vocational school teachers in Slovakia, the research findings can be considered important and have implications for further resilience research.

6- Declarations

6-1- Author Contributions

Conceptualization, S.B., M.V., S.K., G.G., and D.B.; methodology, S.B., M.V., S.K., G.G., and D.B.; software, S.B., and M.V.; validation, S.K., G.G., and D.B.; formal analysis, S.B., M.V., S.K., G.G. and D.B.; resources, S.B., M.V., S.K., and D.B.; data curation, S.B. and M.V.; writing—original draft preparation, S.B., M.V., S.K., G.G., and D.B.; writing—review and editing, S.B., M.V., S.K., G.G., and D.B.; project administration, S.B., M.V., S.K., G.G., and D.B.; funding acquisition, S.B., M.V., S.K., G.G., and D.B. All authors have read and agreed to the published version of the manuscript.

6-2- Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6-3- Funding

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6-4- Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki and approved by The Board for Internal System of Quality Assurance of DTI University, Slovakia, in accordance with the Code of Ethics of DTI University, Slovakia.

6-5- Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

6-6- Conflicts of Interest

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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