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Original research paper

BURNOUT SYNDROME AMONG SPECIAL EDUCATION TEACHERS AT SCHOOLS FOR CHILDREN WITH DISABILITIES IN THE REPUBLIC OF SERBIA: CHALLENGES AND RISK FACTORS*

Ana Drobac** ➤ ORCID: 0009-0005-3616-1986
Institute for Educational Research, Belgrade, Serbia

Isidora Micić ➤ ORCID: 0000-0002-7266-7248
Institute for Educational Research, Belgrade, Serbia

A B S T R A C T

Burnout syndrome has become remarkably widespread, especially in the helping professions. As such, it constitutes an increasingly common research topic. The present study aimed to assess burnout in special education teachers employed at special education schools in Serbia. Likewise, it sought to analyze differences in burnout levels depending on respondents' sociodemographic characteristics and identify burnout-related factors and strategies for overcoming burnout from the perspective of special education teachers. Professional burnout syndrome was assessed using the Copenhagen Burnout Inventory (CBI) adapted for use in a special education teacher sample. The study involved 191 special education teachers (91.1% female) employed at schools in the Republic of Serbia. The results showed that special education teachers exhibited a certain level of burnout. In terms of sociodemographic characteristics, only respondent age and work experience positively correlated with professional burnout. There were no differences in burnout levels depending on other sociodemographic characteristics. The qualitative content analysis showed that burnout-inducing factors included a lack of support, administrative overload, and working with heterogeneous student groups. The most common burnout prevention strategies included

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** E-mail: anadrobac0@gmail.com

physical activity, support from colleagues and family, and maintaining a good work-life balance. These findings highlight the need to improve working conditions and introduce support programs to decrease burnout levels among special education teachers.

Key words:

burnout, special education, special education teachers, autism, intellectual disability.

■ INTRODUCTION

Professional burnout arises as a consequence of long-term exposure to stressors at work (Maslach & Leiter, 2016). Its manifestations include 1) emotional exhaustion, that is, feeling unable to gather strength for the next workday or task and lacking enthusiasm; 2) depersonalization, which includes psychological distancing from others and a cynical and emotionless attitude; and 3) a sense of personal failure and the abandonment of previously set goals, expectations, and “futile efforts” (WHO, 2019). It is most commonly assessed using the Maslach Burnout Inventory (MBI; Maslach et al., 1997).

Burnout syndrome has become remarkably widespread and can affect all employed individuals (Prince, 2018). However, it remains more common among workers whose occupation involves close contact with people requiring help, that is, in the helping professions (Dias & Angélico, 2018). Helping professionals work in demanding conditions, with high levels of responsibility and emotional pressure (Žganec, 1999), which contributes to a higher prevalence of burnout syndrome. Special education teachers constitute a particularly vulnerable group, considering that they face unique challenges not encountered in mainstream education (Olivier & Williams, 2005). Working with children with diverse developmental disabilities requires adapting to their physical, educational, communicational, emotional, and social needs (Curran, 2017; Olivier & Williams, 2005). Research has shown that special education teachers more commonly experience higher levels of burnout, stress, and exhaustion and feel more depersonalized compared to teachers at mainstream schools (Jovanović, 2020; Küçüksüleymanoğlu, 2011). Professional burnout does not only affect their mental and physical health but also the quality of their work with students (Brunsting et al., 2014). It can even cause them to abandon their profession (Emery & Vandenberg, 2010).

Burnout is also shaped by sociodemographic characteristics such as gender, age, and work experience. For instance, women more commonly experience emotional exhaustion, while men exhibit higher levels of depersonalization (Vercambre et al., 2009). Findings on the effects of age and work experience have not been consistent. On the one hand, research has shown that emotional

exhaustion is more conspicuous in younger special education teachers (Gong et al., 2013) and that stress and burnout levels are higher in teachers with less work experience (Fisher, 2011). A possible explanation lies in the fact that teachers develop coping mechanisms for managing work-related stress over the course of their careers. On the other hand, a study reported higher burnout levels among teachers with 11-15 years of work experience compared to their colleagues with up to five years of work experience (Nuri et al., 2017). Another important factor is marital and family status, with burnout more commonly reported by single and divorced individuals (Yorulmaz & Altinkurt, 2018; Duarte et al., 2020) and respondents who do not have children (Maslach & Jackson, 1985). While research has revealed no significant differences in burnout levels between individuals living in houses and people who live in apartments (Taranu et al., 2022), persons who own a home tend to be happier than individuals who live in a rented property (Seiler Zimmermann & Wanzenried, 2019). Certain professional characteristics can also shape burnout. Multiple studies have reported a link between special education teachers' burnout and their students' disability type. For example, teachers who work with children with emotional disorders tend to report greater overload than teachers who work with students with intellectual disabilities (ID) (Banks & Necco, 1990). Furthermore, a study conducted in Iran showed that teachers who worked with students with autism spectrum disorders (ASD) reported higher burnout levels than teachers who worked with children with intellectual disabilities and hearing impairment (Zarafshan et al., 2013). Research in Serbia has also confirmed differences depending on students' disability type. Unlike the Iranian study, Serbian findings indicate that special education teachers who work with children with motor and hearing impairments exhibit higher burnout levels compared to their counterparts working with children with ID and vision impairments (Jovanović et al., 2019a). As suggested by Park and Shin (2020), another burnout-related factor is problematic student behavior, which differs depending on disability type. Special education teachers who work with students who more commonly exhibit problematic behavior more often face great difficulties when managing the class, which can consequently affect burnout levels. Managing work responsibilities is another major challenge special education teachers face throughout their careers. Administrative overload is commonly highlighted as one of the main causes of burnout and change of occupation due to the significant amount of time teachers spend outside their working hours to fulfill their administrative duties (e.g., Wong et al., 2017). Cooperation with colleagues, support staff, institutions, and parents can constitute an additional stressor for special education teachers. However, quality cooperation can significantly contribute to their general work satisfaction (Ansley et al., 2019).

In the Republic of Serbia, there are 48 special education schools organized according to disability type (e.g., schools for children with ID) (Zavod za unapređivanje obrazovanja i vaspitanja, 2018). Nowadays, parents can choose to enroll their child in a mainstream school or a special education school. Consequently, special education schools are mostly chosen by the parents of children with more severe forms of developmental disabilities. According to the Law on the Foundations of the Education System (Zakon o osnovama sistema obrazovanja i vaspitanja, 2023), special education schools are required to enroll students regardless of disability type. This has led to greater class heterogeneity and a larger proportion of students with multiple disabilities since the introduction of inclusive education in 2009 (Nikolić et al., 2019). Apart from students with multiple disabilities, the most numerous are students with ASD and ID. In special education schools, the number of students per class is smaller than in mainstream schools and is limited to 10 students in primary school classes, 20 students in secondary school classes, and six in preschool groups. However, due to class heterogeneity, these numbers are still challenging. Different disabilities such as hearing and vision impairments, motor disabilities, limited intellectual capacities, and combinations of these disabilities require an individualized approach to class organization and providing support to each student (Rapaić et al., 2008). Since 2012, the special education curriculum has been the same as in mainstream schools (Eurydice, 2023), although it can be partially adjusted or entirely changed by the Individual Education Plan (IEP) depending on the child's needs. Special education teachers have the leading role in the creation and implementation of the IEP (Rajšli-Tokoš, 2023). They have a wide range of responsibilities, including the teaching, counseling, diagnosis, and treatment of children who need additional educational support. Furthermore, they work closely with parents, who often constitute a particularly vulnerable category. Despite their significant role in the education system, their profession is still not sufficiently valued in Serbia.

Burnout syndrome affects teachers' professional as well as personal lives. Many studies have identified links between burnout syndrome and sociodemographic characteristics. Regardless of inconsistencies, such findings can provide insight into risk factors in the domain of sociodemographic characteristics and help identify particularly vulnerable groups and inform interventions. Hence, the general aim of this research was to assess burnout among special education teachers employed at special education schools in the Republic of Serbia. More specific aims pertained to examining the links between burnout and work-related characteristics (years of work experience and students' disability type) and personal factors (gender, age, marital status, the number of own children, and housing status). Another specific aim was to qualitatively explore burnout among special education teachers.

METHOD

Sample and Procedure

The initial sample comprised 299 special education teachers. Upon excluding respondents who partially filled out the questionnaires, the final convenience sample comprised 191 special education teachers. Most respondents were women (91.1%), which was expected due to the disproportionate representation of genders among special education teachers. The average respondent age was 42.28 years ($SD=10.14$), while the average work experience was 15.62 years ($SD=9.91$). Other personal and professional respondent characteristics are shown in Tables 1 and 2.

The data were collected online via the SoSci platform (Leiner, 2020) at primary and secondary special education schools in the Republic of Serbia between February and May 2024. A participation invitation letter was sent to the email addresses of the principals of all special education schools in Serbia. The principals were asked to forward the link to questionnaires to special education teachers employed at their schools. Although this sampling method does not ensure representativeness, it does facilitate reaching a large number of potential respondents. Informed consent was obtained from each school principal and respondent prior to conducting the research. Participation was voluntary and anonymous. Respondents were familiarized with the purpose of the study and relevant concepts and they received instructions for filling out the questionnaires.

Ethical Approval. This study has been approved by the Ethics Committee of the Institute for Educational Research, Belgrade, Serbia (No. 122).

Table 1. Respondents’ personal characteristics

		N	%
Marital Status	Single	40	20.9
	Married	108	56.6
	Divorced	19	9.9
	In a relationship/cohabitation	24	12.6
Housing Status	I live in my own apartment/house	132	69.1
	I live in a rented apartment/house	37	19.4
	I live with my parents	22	11.5
Number of Own Children	0	74	38.8
	1	48	25.1
	2	60	31.4
	≥3	9	4.7

Table 2. Characteristics of respondents’ students

		N	%
Student Age Group	Preschool	15	7.9
	Lower primary school (Grades 1-4)	87	45.5
	Upper primary school (Grades 5-8)	63	33.0
	Secondary school	26	13.6
Most Common Disabilities Among Students	Intellectual disability (ID)	79	41.4
	Autism spectrum disorders (ASD)	78	40.8
	Multiple disabilities	21	11.0
	Sensory and motor impairments	13	5.8

Instruments

Quantitative Data Analysis

The Copenhagen Burnout Inventory (CBI, Kristensen et al., 2005) is a 19-item questionnaire that measures three dimensions of burnout, including personal (six items), work-related (seven items), and client-related (six items) burnout. The Personal Burnout subscale measures the level of physical and psychological exhaustion experienced (e.g., *How often do you feel tired?*). The Work-Related Burnout subscale assesses the extent of physical and psychological exhaustion attributed to work (e.g., *Is your work emotionally exhausting?*). The Client-Related Burnout subscale measures the level of physical and psychological exhaustion experienced when working with clients (e.g., *Do you find it frustrating to work with clients?*). In line with the authors' recommendations (Kristensen et al., 2005) and respondents' workplace, the word *client* was replaced with *student*. Responses were provided on a five-point Likert-type scale ranging from 0 to 4 (0 = never/almost never or to a very low degree, 4 = always or to a very high degree). Subscale scores were calculated according to the instruction, with 0=0 points, 1=25 points, 2=50 points, 3=75 points, and 4=100 points. The total score was calculated as the mean value of scores on individual subscales. Respondents with a score higher than 50 on any subscale (Creedy et al., 2017) were considered to experience burnout at work, with the level depending on the score (50-74 points = moderate burnout, 75-99 = high burnout, and 100 = severe burnout). The reliability of the CBI was high ($\alpha=0,96$) and the subscales also showed good reliability: Personal Burnout ($\alpha=0,89$), Work-Related Burnout ($\alpha=0,91$), and Student-Related Burnout ($\alpha=0,91$).

The questionnaire for collecting sociodemographic data was constructed for the purpose of this research and encompassed questions about respondents' age, gender, years of work experience, marital status, number of own children, housing status, and students' disability types.

Qualitative Data Analysis

The questionnaire forwarded to special education teachers included three open-ended questions: 1) Which factors do you associate with burnout in your profession?; 2) Do you believe that there is a link between special education teachers' burnout and their students' disability type? Please, elaborate; and 3) Which stress management strategies do you apply during your workday? There was no word limit for these questions and respondents could elaborate their opinions to the desired extent.

Respondents' answers were analyzed using the qualitative content analysis method (Braun & Clarke, 2021). Two researchers independently analyzed all the responses. In the first phase, the researchers read all the responses multiple times to familiarize themselves with the content and write down initial ideas. What followed was the generation of the initial codes, that is, the key meanings extracted from the data. The analysis was conducted inductively, meaning that the categories were not predefined but were instead isolated from teachers' responses. Multiple categories could be identified within one response. Both researchers individually created preliminary categories before engaging in the process of aligning the suggested categories. Finally, response orders were compared and the identified discrepancies were discussed and resolved within the author team. To further verify reliability, a researcher unfamiliar with the study coded 20% of the data (Syed & Nelson, 2015). As recommended by Syed and Nelson, the coder in charge of verifying reliability coded a data subset (usually 20% of the total data) and these codes were only used to establish inter-rater reliability. Agreement level was measured via the intraclass correlation coefficient (ICC) (Gisev et al., 2013; Landers, 2023) using IBM SPSS Statistics, v. 29.0. The number of coded responses was greater than the number of respondents as some responses contained multiple ideas, perceptions, emotions, or needs, which were accordingly coded into different themes.

■ RESULTS

Quantitative Analysis Results

Respondents' average scores on burnout subscales were 60.23 (Personal Burnout), 54.04 (Work-Related Burnout), and 47.71 (Student-Related Burnout), with an average Total Burnout Score of 54. However, more significant than the average values was the assessment of burnout levels. According to the data shown in Table 3, about three in four respondents (75.9%) experienced a certain level of personal burnout, with 19.9% exhibiting high burnout levels and 1.6% experiencing severe burnout. Nearly two in three respondents (63.9%) reported experiencing work-related burnout, with 20.9% exhibiting high burnout levels. More than half of the sample (53.4%) faced student-related burnout, out of which 12% reported high burnout levels and 3.1% exhibited severe burnout. In terms of the total score, nearly half of the sample (46.1%) experienced moderate burnout, more than one in seven respondents (15.2%) exhibited high burnout levels, and over a third of the sample (38.7%) showed low or non-existent burnout levels. The values of skewness and kurtosis were within an acceptable range for a normal distribution.

Table 3. Prevalence and average subscale scores

		N (%)	M (SD)	Sk	Ku
Personal Burnout	Non-Existent/Low (<50)	46 (24.1)	60.23 (18.44)	-0.25	-0.17
	Moderate (50-74)	104 (54.4)			
	High (75-99)	38 (19.9)			
	Severe (100)	3 (1.6)			
Work-Related Burnout	Non-Existent/Low (<50)	69 (36.1)	54.04 (22.23)	-0.22	-0.67
	Moderate (50-74)	82 (42.9)			
	High (75-99)	40 (20.9)			
	Severe (100)	0 (0)			
Student-Related Burnout	Non-Existent/Low (<50)	89 (46.6)	47.71 (24.48)	-0.04	-0.60
	Moderate (50-74)	73 (38.2)			
	High (75-99)	23 (12.0)			
	Severe (100)	6 (3.1)			
Total Burnout Score	Non-Existent/Low (<50)	74 (38.7)	54.00 (20.44)	-0.23	-0.52
	Moderate (50-74)	88 (46.1)			
	High (75-99)	29 (15.2)			
	Severe (100)	0 (0)			

The next research aim was to examine the differences and correlations between certain personal and professional characteristics and burnout. In terms of the link between respondents' age and average scores, the results showed no statistically significant correlations between age and Personal Burnout ($r=0.08$, $p=0.28$), Student-Related Burnout ($r=0.12$, $p=0.11$), and the Total Burnout Score ($r=0.14$, $p=0.06$). A very weak but statistically significant positive correlation was found between respondent age and Work-Related Burnout ($r=0.18$, $p=0.02$). Nearly identical results were obtained for years of work experience. There were no statistically significant correlations between years of work experience and Personal Burnout ($r = 0.08$, $p = 0.28$), Student-Related Burnout ($r=0.11$, $p=0.12$), and the Total Burnout Score ($r=0.14$, $p=0.06$). A very weak statistically significant positive correlation was found between years of work experience and Work-Related Burnout ($r=0.18$, $p=0.02$).

A one-way analysis of variance (ANOVA) was conducted to determine differences in average burnout scores depending on personal and professional respondent characteristics. Differences in the Total Burnout Score and the CBI subscales were analyzed in relation to respondents' marital status, housing status, number of own children, and students' age group. The results revealed no statistically significant between-group differences in the Total Burnout Score and the CBI subscales in relation to these variables ($p > 0.05$). Due to the small number of respondents per group based on students' disability type, the analysis focused on differences between two groups – teachers who worked with students with ASD and teachers who worked with children with ID. The t-test showed statistically significant between-group differences along all burnout dimensions: Personal Burnout ($t(155) = -2.75, p = 0.01$), Work-Related Burnout ($t(155) = -2.16, p = 0.03$), and Student-Related Burnout ($t(155) = -2.58, p = 0.01$). The results revealed that special education teachers who worked with students with ASD obtained higher average burnout scores in all three domains compared to their counterparts who worked with children with ID.

Qualitative Analysis Results

Burnout Factors Among Special Education Teachers

The first research question pertained to identifying work-related burnout-related factors among special education teachers. The analysis encompassed 253 responses provided by 187 respondents. With an inter-rater reliability of 0.88, the level of agreement between coders was high. The categories, their frequency, and response examples are shown in Tables 4, 5, and 6. During data analysis, multiple categories were identified and classified into three wider categories. The first wider category pertained to *support and cooperation*, with respondents most commonly highlighting the need for cooperation *with colleagues* and *parents*, followed by support from *other institutions* and *school counselors* as well as *psychological support*. The second category referred to *professional development and the status of the profession*. Namely, respondents recognized *personal development* as a solution for dealing with professional challenges more easily, for instance, “through burnout control programs”. Some respondents highlighted insufficient *respect for the profession* and the need for *reduced service years for retirement*, claiming that “it is impossible to do this job for 35+ years”. Fewer respondents believed that special education teachers should be *more involved in school operations*. The third category encompassed *work organization and conditions*. As prerequisites to increasing effectiveness, most respondents listed *smaller class size*, more opportunities for *individual work with students*, and *shorter class periods* or *fewer working hours*. Considering class heterogeneity, respondents stated that “working with groups of five or more children is highly demanding and exhausting” and that “in mixed groups, each child requires a different approach,

which is extremely hard or impossible for one teacher to accomplish”. Accordingly, the second most common subcategory precisely pertained to *involving more special education teachers*, with an example being that “two teachers work as a team” in one class. Respondents also frequently stated that *less paperwork* would make their work significantly less challenging. They mentioned spending a large portion of their working hours dealing with excess paperwork and claimed that such “exhaustive administration is often meaningless in practice”. Some respondents believed that teaching according to the regular syllabus and curriculum is often not adequate for this student population, recognizing better solutions in *reinstating old programs* and focusing on *students’ functional skills*. They found it necessary to teach “functional and life skills” instead of mandatory subjects such as “Italian, History, Physics, and Chemistry”, which often have “no sense or meaning” for students in special education. Less commonly, teachers stated that they needed *longer breaks*. In terms of class organization, they believed that *activities outside the classroom* would be beneficial, that they would work more effectively in a better-adapted *physical space*, and that *assistants’ presence* in the classroom is necessary for classes to run smoothly. Several respondents noted that burnout could be reduced by more common rotations, that is, *switching classes*, and finally, by being able to *take time off during term time*.

Table 4. Burnout factors – support and cooperation category, response frequency and examples

Category	Frequency	Response Example
Among Colleagues	24	<i>Support from colleagues, because support facilitates overcoming stressful situations that can arise when working with children.</i>
School Counselors	4	<i>Cooperation among colleagues and school counselors, greater support from school counselors, relief from extracurricular responsibilities (managing school teams).</i>
Other Institutions	14	<i>Stronger ties to social protection services and healthcare with the aim of monitoring students and also education outcomes...</i>
Psychological Support	1	<i>Psychological support for employees.</i>
With Parents	17	<i>Better cooperation with parents to ensure better results through more diligent and regular learning at home...</i>

Table 5. Burnout factors – professional development and the status of the profession category, response frequency and examples

Category	Frequency	Response Example
Respect for the Profession	9	<i>More respect for the profession.</i>
Reduced Service Years for Retirement	8	<i>Reduced service years for retirement; it is impossible to do this job for 35+ years.</i>
Personal Development	14	<i>Continuous personal development through burnout control and self-development programs... if anyone asked us, the employees, what we think.</i>
Involvement in School Operations	3	<i>More freedom to express our opinions given by the state, society, and, of course, our institution's management.</i>

Table 6. Burnout factors – work organization and conditions category, response frequency and examples

Category	Frequency	Response Example
Involving More Special Education Teachers	26	<i>Increase the number of special education teachers; expand the teaching staff – so there are more teachers to serve the student population.</i>
Smaller Classes/Individual Work With Students	37	<i>Fewer students per class and more room to devote attention to each student.</i>
Shorter Class Periods/ Fewer Working Hours	32	<i>Reduce class periods to 30 minutes; fewer working hours.</i>
Longer Breaks	8	<i>Longer breaks during work would be beneficial for both the children and the teacher.</i>
Reinstating Old Programs	7	<i>To adapt the programs to children, that is, to reinstate the old ones, so we do not exhaust ourselves even more looking for ways to fit them into subjects that have no sense or meaning for them. Of what use are English, Italian, History, Physics, Chemistry, and other subjects to children who cannot speak and wear diapers?</i>

Focusing on Functional Skills	14	<i>Devising a concept and program for children aimed at working on functional skills, toilet training, and life skills.</i>
Resource Availability	9	<i>Schools need to be better equipped, with a workspace for creating didactic, adapted materials available to everyone, textbooks, standardized evaluation instruments.</i>
Activities Outside the Classroom	6	<i>The possibility to safely take children to the schoolyard; Every child with an autism spectrum disorder should have a personal assistant and spend as much time as possible in the open and engage in work therapy.</i>
Less Paperwork	26	<i>Eliminating "paperwork" and senseless everyday introduction of some new meaningless tasks and responsibilities.</i>
Assistants' Presence	3	<i>The presence of assistants during class and 2 teachers working with groups of children with autism spectrum disorders.</i>
Physical Space	5	<i>Better adapted spaces for students: it is necessary to provide a pleasant environment for learning life skills; larger workspaces.</i>
Switching Classes	7	<i>The possibility of frequent rotation in particularly demanding classes.</i>
Taking Time Off During Term Time	2	<i>...possibility to take time off as needed and not during collective annual leaves or school breaks.</i>

*Students' Disability Types in the Context of Burnout Among
Special Education Teachers*

The purpose of the second question was to determine respondents' views on working with children with different developmental disabilities. Table 7 shows examples extracted from a total of 157 responses provided by 131 respondents. The inter-rater reliability was 0.99, indicating an exceptionally high level of agreement between coders. When asked whether there was a link between students' disability type and special education teachers' burnout, as many as 77.7% of respondents believed that disability type can significantly affect burnout levels. The largest number of respondents believed that working with *children with ASD* was most demanding. They found it more exhausting because children with ASD often have "comorbidities", "behavioral disorders", and "mental health problems", which is why they "require more energy and vigilance from the teacher because they need constant supervision". The second most common category encompassed students with *psychiatric disorders and aggressive behavior*. Respondents elaborated that such students "more commonly suffer from behavioral disorders", can be "unpredictable, suicidal, unstable, and prone to mood swings", and tend to be particularly problematic when "not receiving adequate medical treatment". Nearly as numerous were respondents who stated that working with children with *multiple disabilities* is often challenging because "each child is unique". Teachers noted that working with such students requires far more effort because these children are mostly "nonverbal, hyperactive, unable to satisfy their physiological needs independently, and struggling with limited concentration and attention". Students with *behavioral disorders* were also identified as demanding because of their tendency to be "unpredictable", "get upset easily", and "possibly hurt themselves or others". A similar number of responses referred to ID, with respondents claiming that working with students with ID is harder due to "common misunderstandings", "low levels of interactivity, and small chances of progress". Several respondents recognized *nonverbal students* as children who are particularly hard to work with because "there is no feedback", "they cannot communicate", "they often wear diapers, and it is impossible for them to acquire academic knowledge". One respondent described students with attention-deficit hyperactivity disorder (ADHD) as the most demanding and one teacher found it most difficult to work with *under-disciplined* students. Somewhat more numerous were respondents who cited difficulties in working with older students, that is, students in *higher grades*. Several teachers believed that class heterogeneity or *mixed classes* had a greater influence on work organization than disabilities themselves. They stated that their "work is frustrating when each student in the class is at a different developmental

level“ and that “each student requires a special way of adapting the learning content and the time invested”.

Table 7. Categories, category frequency, and response examples related to the question about students' disability types

	Category	Frequency	Response Example
Disability Type Related to Respondent Burnout	Psychiatric Disorders and Aggressive Students	26	<i>It is frustrating to work with children who have psychiatric disorders in addition to primary disabilities. They often act out in an aggressive manner.</i>
	Autism Spectrum Disorders (ASD)	52	<i>It is much harder to work with students with a pervasive/autism spectrum disorder compared to other types of disabilities and disorders. When getting to know students on the spectrum, working with them requires longer observation, students' reactions are impossible to foresee, there are no clear strategies for promoting development in such students.</i>
	Behavioral Disorders	12	<i>Students with more severe behavioral disorders, where the family has no influence whatsoever, who are dangerous to other students but “have to” go to school.</i>
	Attention Deficit Hyperactivity Disorder (ADHD)	1	<i>It is most exhausting to work with children with attention deficit disorders and elements of hyperactivity, that is, ADHD... Due to their short attention span, it is necessary to devise a whole range of different activities.</i>
	Intellectual Disability (ID)	10	<i>Working with ID students is pretty hard because of the number of repetitions and constant troubles with understanding tasks and activities.</i>
	Multiple Disabilities	20	<i>Working with children with multiple disabilities is harder compared to working with children with one disability or deficit, which makes it easier to adapt to the child and the environment.</i>
	Under-Disciplined Students	1	<i>Working with under-disciplined children is more exhausting. It requires too much energy.</i>
	Nonverbal Students	5	<i>Students have severe disabilities, they are nonverbal, often in diapers, it is impossible for them to acquire academic knowledge.</i>
	Mixed Classes	5	<i>Group heterogeneity affects work quality because each student requires a special way of adapting the learning content and the time invested.</i>
Disability Type Not Related to Respondent Burnout	Higher Grades	3	<i>It is harder and more frustrating to work with students in higher grades, who are already in puberty but plateauing intellectually.</i>
		22	<i>I think it is equally hard to work with all students.</i>

After stating opinions about whether students’ disability type can affect special education teachers’ burnout, 49 respondents further elaborated their answers and provided 63 responses regarding reasons why they found working with certain students more difficult (Table 8). The inter-rater reliability was 0.98, indicating a particularly high level of agreement between coders. The most common responses pertained to *student characteristics and behavior*, or more specifically, the “complexity of psychophysical disabilities”, “hyperactivity”, and “student noisiness and aggressiveness”. Respondents further recognized that the complexity of disabilities negatively affected their *work effectiveness and achieving results*, stating that “a lot of work yields minimal results” and that they often needed “more energy and perseverance to execute an activity from start to finish”. They further recognized the *need for an individualized approach*, noting how they “momentarily have to explain in multiple ways”, how “every disability requires a different approach”, and how it is sometimes “hard to adjust and satisfy each child’s specific needs at every given moment while adhering to the curriculum and lesson plan for the day”. A category that reappeared as a source of frustration was a *lack of cooperation with parents* due to “high expectations”, “inadequately set boundaries at home”, and “parents not trying hard enough to follow teachers’ advice on how to improve their children’s engagement and progress”. Several responses pertained to inadequate *working conditions*, with teachers stating that they needed “more preparation, methods, and resources” as well as room to “take breaks during the workday”. The remaining respondents found working with certain children more difficult due to “multiple different factors”, while also claiming that “everything becomes frustrating after a while”.

Table 8. Categories, category frequency, and response examples related to the question of what makes working with certain students more challenging

Category	Frequency	Response Example
Lack of Cooperation with Parents	7	<i>The parents do not try hard enough to follow teachers’ advice on how to improve their children’s engagement and progress.</i>
Working Conditions	5	<i>The students are wonderful when you fit in and they accept you. I do not find it hard to work with them. I need a break during my workday, but the school management does not agree because in that case, they would need to organize for someone to be with the students during my break.</i>
Need for an Individualized Approach	11	<i>It is frustrating when you have children with different abilities and create materials for each one of them individually (in accordance with their abilities) and by the end of the class, there is always that one student who ends up completely neglected.</i>

Student Characteristics and Behavior	24	<i>I find it really hard to bear when children are screaming. I understand that is their way of communicating, but I find it hard to bear and the same goes for aggressiveness.</i>
Work Effectiveness and Achieving Results	13	<i>With some children, a lot of work yields minimal results; The effort is great and the results are minimal.</i>
Other	3	<i>Everything becomes frustrating after a while.</i>

Special Education Teachers’ Strategies for Managing Stress During the Workday

The final question pertained to stress management strategies. Table 9 features examples of a total of 239 responses provided by 186 respondents. The inter-rater reliability was 0.92, indicating a high level of agreement between coders. The analysis yielded 14 categories related to this question. The most common strategy was *physical activity*, including walking, running, and regular training sessions. The second most prominent strategy was *leisure*, with respondents listing books, music, and television shows and movies as effective solutions for relaxing after work. Numerous respondents also stated that they endeavored to *create a pleasant work atmosphere*, for instance, through play, creative work, and treatment adjustment. Some respondents strived to establish *work-life boundaries*, “leave their work behind as soon as they exit the school, and focus on other things”, while also organizing their workday to ensure they can *take breaks at work* more frequently. Somewhat less numerous were respondents who opted for *relaxation* through music and relaxation exercises and spiritual practices such as *religiousness and meditation* as stress management techniques. While several respondents stated that they enjoyed spending *time outdoors*, others turned to *humor*, while some sought to preserve their mental health through *psychotherapy*. A few special education teachers claimed that they used no strategies because they “did not feel any particular need”, while the rest opted for *other* strategies, such as “changing their workplace”.

Table 9. Categories, category frequency, and response examples related to the question about respondents’ stress management strategies

Category	Frequency	Response Example
Leisure (music, reading, movies...)	45	<i>I read, listen to music, hang out with friends, theater.</i>
Time Outdoors	8	<i>Spend at least two hours outdoors.</i>
Socialization (family, children, friends...)	14	<i>Visiting friends and socializing outside school.</i>
Support From Colleagues	7	<i>Talking to colleagues about the problems we face.</i>
Creating a Pleasant Work Atmosphere	32	<i>Every day, with every child, I try to do little things that brighten their day, put a smile on their face, adjust treatment, which also makes me feel more successful and fulfilled.</i>
Physical Activity	50	<i>Training sessions before/after work.</i>
Work-Life Boundaries	19	<i>I try to leave my work behind as soon as I exit the school and focus on other things and devote my attention to my family.</i>
Relaxation	18	<i>Relaxing music, relaxation exercises.</i>
Psychotherapy	4	<i>After years of burnout, I have started taking walks, yoga, psychotherapy, medication.</i>
Humor	7	<i>Humor, play, laughter.</i>
Spirituality	7	<i>Tai chi or yoga.... Prayer ...</i>
Taking Breaks at Work	11	<i>I try to organize my activities so as to engage in some relaxing or outdoor activities at the end of the day. I also always take advantage of the lunch break.</i>

No Strategies	17	<i>I do not apply anything, at least not that I am aware of. I do not feel any particular need to.</i>
Other	7	<i>I plan to change my workplace and occupation.</i>

■

DISCUSSION AND CONCLUSION

This research aimed to assess burnout among special education teachers employed at special education schools in Serbia. It further sought to analyze differences in burnout levels depending on teachers’ sociodemographic characteristics and identify burnout-related factors along with burnout prevention strategies from the perspective of special education teachers.

Quantitative Results. The study showed that special education teachers exhibited a certain level of burnout. In terms of the total score, nearly two in three respondents reported some level of burnout. This finding can be compared to the results of a 2016 study (Popov & Stefanović, 2016) in which 15% of respondents showed early symptoms of burnout according to the Burnout Checklist (Hart, 2009). In a 2019 study, the results revealed that about one in three respondents exhibited a high level of burnout on at least one subscale of the MBI (Jovanović et al., 2019b). A 2021 study that also used the MBI showed that 38% of special education teachers experienced high levels of emotional exhaustion (Jovanović et al., 2021). Although findings indicate a mild increase in burnout over the past several years, differences in results can partly stem from the application of three different instruments.

Our results showed that about three in four respondents experienced personal burnout, which pertains to the level of physical and psychological exhaustion experienced regardless of the work environment and constitutes an additional aspect in relation to the MBI. About two in three respondents reported experiencing work-related burnout, which most closely corresponds to professional burnout. The Work-Related Burnout subscale encompasses aspects of professional exhaustion and depersonalization, which are also assessed by the MBI (Maslach & Jackson, 1985). On the Student-Related Burnout subscale, half of the respondents reported experiencing burnout, resulting in the lowest average out of all three subscales. A similar finding was obtained in a study conducted on a sample of kindergarten teachers in Serbia, showing that the lowest average scores were obtained for burnout associated with working with children (Mijatović & Strižak, 2023). The lowest average scores on this subscale were also recorded in a study conducted on a sample of healthcare workers during the COVID-19

pandemic, where the lowest burnout levels were associated with working with patients (Duarte et al., 2020). The results of the present research indicate that burnout among special education teachers is more linked to personal factors and working conditions and less to direct work with students. Although burnout has been linked to satisfaction with interpersonal relations at work (Ansley et al., 2019), evidence suggests that working with students is not a risk factor in itself and that burnout is more strongly related to working conditions, both because of the actual state of affairs and due to the fact that teachers perceive them as a cause of their exhaustion (Pyhältö et al., 2011).

In terms of sociodemographic variables, there were significant positive correlations between work-related burnout, years of work experience, and age. These findings are in line with findings indicating that more experienced special education teachers can be more susceptible to burnout (Amri et al., 2020). Although the correlations were weak, they still revealed that older respondents and teachers with more work experience were more prone to work-related burnout. As emphasized in similar research, more experienced teachers can find it harder to adjust to education reforms. Combined with cumulative dissatisfaction with working conditions and greater investment of personal resources, this can place them at a higher risk of burnout in comparison to less experienced colleagues still seeking to prove themselves (Jovanović, 2020). Gender differences were not analyzed considering that the sample was disproportionately female, reflecting the general gender distribution in the profession. In terms of other demographic variables, the results showed no significant differences in burnout levels on any of the three subscales depending on respondents' marital status, housing situation, number of own children, and students' age group. Based on these findings, it can be concluded that within the present sample, the majority of analyzed demographic factors had no significant effect on burnout levels. Research conducted in Serbia has yielded inconsistent findings in terms of links between sociodemographic variables and burnout syndrome. For instance, one study (Jovanović et al., 2019a) found no differences depending on respondents' marital status, which is in line with the present study's findings. However, another research (Jovanović et al., 2019b) identified respondents' marital status as a significant predictor of burnout syndrome among special education teachers. Both studies (Jovanović et al., 2019a; Jovanović et al., 2019b) reported differences depending on respondents' housing situation, with teachers who still lived with their parents reporting higher burnout levels compared to the other respondents. Differences in findings can stem from differences in samples and research conditions. Likewise, living conditions and social expectations may have changed over the past several years, leading to different findings.

In the present research, respondents who predominantly worked with children with ASD differed from teachers who worked with students with ID along all three CBI dimensions. Working with children with ASD is demanding as their specific characteristics including behavioral, emotional, and communication difficulties introduce additional challenges into the teaching process and lead to higher levels of emotional stress and burnout among teachers (Atiyat, 2017). Compared to teachers who work with children with ID and hearing impairments, teachers who work with children with ASD tend to report higher burnout and stress levels (Zarafshan et al., 2013).

Qualitative Results. The qualitative content analysis revealed the factors respondents associated with burnout, with responses encompassing different disability types and their contributions to burnout as well as strategies used to reduce work-related stress.

Among the *factors respondents associated with burnout*, one of the most prominent categories referred to support and cooperation with colleagues, other institutions, and parents. Numerous studies have identified good interpersonal relations and social support at work as significant factors contributing to reduced burnout in various professions (e.g., Stanley & Sebastine, 2023). For instance, findings have shown that social support mediates the relationship between emotional exhaustion and work responsibilities, helping healthcare workers manage stress more effectively (Ruisoto et al., 2021). Furthermore, social support reinforces coping strategies and allows employees to more easily overcome challenges at work (Ben-Zur & Michael, 2007). In terms of cooperation with parents, respondents noted that its lack constitutes a potential burnout-related factor as well as a source of added difficulties in working with certain students. Numerous studies have reported a significant correlation between cooperation with parents and professional burnout, primarily in terms of emotional exhaustion and personal success (e.g., Skaalvik & Skaalvik, 2009; Squillaci & Hofmann, 2021). This is also supported by the findings of a study conducted in Lithuania (Kaffemanienė et al., 2021), in which respondents claimed that parents often have insufficient knowledge about their children's specific needs, cannot assess the situation realistically, and disrupt experts' work with their actions. Furthermore, parents frequently blame teachers for students' developmental problems and deny or hide the fact that their children have developmental disabilities, which makes teachers' work more difficult. Cooperation with parents can be psychologically challenging and therefore constitute a potential stressor, especially for inexperienced teachers (Stoeber & Rennert, 2008; Betoret, 2009, as cited in Squillaci & Hofmann, 2021). Stress among teachers can be induced by conflicts with parents as well as parents' complaints and tendency to question the school's decisions and practices (Skaalvik & Skaalvik, 2009).

However, the successful education of children with developmental disabilities hinges on good cooperation between parents and (special education) teachers. Successful cooperation and open communication are crucial to fostering student achievement, solving problems in education, and providing adequate support to all actors in the educational process (Ozmen et al., 2016). The response category pertaining to professional development and the status of the profession showed that most respondents believed that personal development and burnout prevention programs significantly contribute to work satisfaction and stress reduction. A study (Van Dierendonck et al., 2005) confirmed the significance of such programs, with participants exhibiting lower levels of exhaustion and higher levels of happiness and professional effectiveness compared to the control group. These results highlight continuing professional development and adequate support programs as the key factors in stress management and the promotion of professional satisfaction in this occupation. Some respondents emphasized their belief that society insufficiently values their profession and that it is necessary to reduce service years for retirement. This is in line with findings suggesting that studies evaluating the risk of burnout should not only focus on demographic factors but also individual work satisfaction (Baran et al., 2010). Teachers' susceptibility to burnout can be shaped by satisfaction with working conditions, salary, the status of the profession, involvement in school operations, and professional development opportunities. Professional development allows teachers to continuously learn and adapt to changes at work, which helps reduce the profession abandonment rates (Wasburn-Moses, 2005). The third category pertained to work organization and conditions, with respondents most commonly highlighting the need to reduce class size, involve more special education teachers, and enable individualized instruction. A study conducted in Serbia identified effective class management (Jovanović et al., 2021) as a significant predictor of burnout levels on all three MBI subscales. Other research (e.g., Gersten et al., 2001) has also linked burnout in special education teachers to the lack of possibilities to implement an individualized approach. While teachers are expected to adapt to each student's needs, the application of such an approach is hindered by class size and the growing proportion of students with multiple disabilities. This is closely related to class period length, which is the same as in mainstream schools in the Republic of Serbia. The scope and nature of special education teachers' work require using a range of skills and resources necessary to adapt to increasingly diverse student abilities and help students reach their learning goals. Daily administrative tasks constitute another reason for work-related exhaustion among special education teachers. Research conducted in America has identified administrative overload as one of the leading causes of work-related burnout and profession abandonment among teachers (e.g., Wong et al., 2017). For instance, in 2013, the US Office of Special

Education Programs reported that 53% of special education teachers employed at primary and secondary schools spent more time completing paperwork than fulfilling additional responsibilities, such as attending Individualized Education Program meetings, devising lesson plans, and grading students' work (Hester et al., 2020). In the present study, some respondents also linked work-related burnout to the syllabus and curriculum, advocating the reinstatement of "old" programs and a focus on students' functional skills. Some researchers have asserted that the issue of burnout syndrome is not only individual but systemic and rooted in the education system, with rigid curriculums and policies that fail to take into consideration students' diverse needs (Santoro, 2018).

In terms of the effects of *students' disability types on burnout among special education teachers*, respondents' answers highlighted ASD, psychiatric disorders, aggression, and multiple disabilities as disability types that make teachers' work most challenging. Respondents primarily found that the reason why working with certain students is harder lies in the characteristics of certain disability types and the behavior exhibited by students with such disabilities, including noisiness, screaming, and aggressiveness. They also believed that the behavioral manifestations of students' disabilities made their work insufficiently effective and made it more difficult to achieve any results. This is supported by findings suggesting that special education teachers who work with students with ASD as well as emotional and behavioral problems are at a higher risk of burnout (Garwood et al., 2018; Wong et al., 2017). In a recently published meta-analysis, Park and Shin (2020) explained how burnout is influenced by student behaviors, which differ depending on disability type. Hence, although there are specific challenges associated with working with students with ASD, psychiatric disorders, and aggressive behavior, working with students with other disabilities such as ADHD and under-disciplined and nonverbal students can also be extremely demanding. Considering the fact that classes are often heterogeneous and include students with different disability types, demanding behavior can be an additional source of stress for the teacher since different needs have to be satisfied simultaneously. It is interesting to note that several respondents found it more difficult to work with students in higher grades. Although such results were not obtained when analyzing differences in relation to students' age group, it can be assumed that older students who are going through puberty can additionally complicate the class dynamics. Several studies have found links between student age and burnout among teachers. Specifically, one study found higher burnout levels in teachers working with students in higher grades (aged 13-19) (Brunsting et al., 2014).

Finally, *respondents' strategies for managing stress during the workday* were numerous and diverse. The most common response pertained to physical activity, such as running and regular training sessions before or after work. It is well-known that physical activity has great benefits for mental and physical health and studies have shown that teachers who engage in physical activity tend to report lower burnout levels (e.g., González-Valero et al., 2023). It would seem that teachers who are not physically active are more prone to developing anxiety and experiencing professional burnout (Jodra & Domínguez, 2020). Another key stress management strategy pertains to working conditions, with numerous respondents reporting efforts to create a pleasant atmosphere at work, followed by maintaining a good work-life balance, and, somewhat less commonly, relying on support from colleagues. The work atmosphere and working conditions are factors that greatly determine how the person functions in the given work environment (Chan et al., 2015) and they have also been described as factors that significantly influence burnout (Maslach & Leiter, 2016). Research has revealed a link between the perception of a positive work atmosphere and lower levels of exhaustion in the teaching profession (Randelović & Stojiljković, 2015). When employees perceive the work atmosphere as positive, they have a greater sense of relatedness with their coworkers and superiors and they tend to be more dedicated to their job. Working conditions certainly constitute a factor that significantly influences employees' work-life balance. If employees are forced to sacrifice their free time to fulfill excess work duties, they are likely to experience higher levels of emotional exhaustion and professional burnout (Cho et al., 2023; Lin et al., 2014). This indicates that maintaining a good work-life balance is a crucial strategy for reducing professional burnout. Hence, it is not surprising that a large portion of respondents' answers pertained to leisure activities, such as watching movies, reading, and listening to music. Research has confirmed that spending free time on hobbies is a good strategy for reducing burnout levels (Alanazi, 2024; Cheng et al., 2018). Teachers who are happy with the way they spend their free time can experience lower levels of burnout and depersonalization as well as a greater sense of personal success because hobbies give them "respite from work" (Borgonovi et al., 2023). Positive experiences outside of work can improve teachers' well-being, which can explain the link between enjoying leisure activities and professional burnout (Alanazi, 2024). Several respondents also listed spiritual practices such as prayer, yoga, and meditation as stress management strategies. Other research has also shown that spirituality can help decrease burnout levels (Chirico et al., 2020; Sharp Donahoo et al., 2018). Such practices may give respondents more "strength" to cope with stressful situations. Although a rather small number of respondents gave such answers, it is interesting to note that the Other category also encompassed responses referring to leaving work and opting for a career change. The link between

overwhelming stress at work and leaving the profession among special education teachers has been confirmed in multiple studies (Brunsting et al., 2014; Cancio et al., 2013). For instance, a study conducted in America (Hester et al., 2020) showed that about 52% of respondents planned on leaving their jobs. The key reasons included work demands such as writing IEPs, administrative overload, a lack of support and resources including insufficient financial remuneration and support for employees and students, and negative effects on physical and mental health. Respondents reported feeling exhausted, overwhelmed, and forced to sacrifice their free time and personal relationships, while also noting a lack of support and opportunities to advance and receive recognition for their work. An extensive literature overview (Billingsley & Bettini, 2019) encompassing the period of 2002-2019 identified factors contributing to profession abandonment, the most prominent of which included working conditions, work demands, a lack of support, and administrative duties. Together with negative emotional reactions, a combination of these factors can indirectly lead to the decision to abandon the profession.

The present study results revealed moderate burnout levels in a sample of special education teachers employed at special education schools in Serbia. Respondents obtained higher average scores on the subscales of Personal Burnout and Work-Related Burnout, with somewhat lower scores on the Student-Related Burnout subscale. Also identified in special education teachers' responses were burnout-related factors and work-related stress management strategies. The main causes of burnout recognized by respondents pertained to support and cooperation with colleagues, other institutions, and parents, followed by work organization and conditions, and finally, professional development and the status of the profession. These findings highlight the need to improve working conditions at special education schools and increase the involvement of special education teachers in decision-making processes, while also raising society's awareness of the significance of the profession. Considering that the results showed no differences depending on sociodemographic factors apart from the links between professional burnout and respondent age and work experience, it would be beneficial for future research to identify variables that could better explain burnout in this profession. Moreover, in light of the current situation in special education, future research should also examine factors that motivate special education teachers to remain in the profession. Still, it is important to highlight the limitations that are relevant to the interpretation of the results. Given that the sample was convenient, the results cannot be generalized to the entire population of special education teachers. Random (e.g., stratified) sampling would ensure that every member of the population is equally likely to be encompassed by the sample, which would increase the representativeness of the data. Respondents were selected via an intermediary, that is, their participation partly hinged on principals' readiness to forward the questionnaires to their employees. Having in

mind the research topic, it can be assumed that respondents were mostly teachers who were more interested in this subject. Furthermore, the data were collected via an online platform, which can result in sampling bias regarding respondents' digital literacy, with a higher likelihood of participation among the more digitally skilled. Likewise, since the analyses only encompassed the responses of teachers who chose to participate, out of all the teachers employed at the 48 schools contacted, the results cannot be generalized to all special education teachers in Serbia.

REFERENCES

- Alanazi, H. M. N. (2024). The role of leisure satisfaction, leisure boredom, in predicting occupational burnout among public primary school teachers in Saudi Arabia. *Pakistan Journal of Life and Social Sciences*, 22(1), 146–167. DOI:10.57239/PJLSS-2024-22.1.0012
- Amri, A., Abidli, Z., Elhamzaoui, M., Bouzaboul, M., Rabea, Z., & Ahami, A. O. T. (2020). Assessment of burnout among primary teachers in confinement during the COVID-19 period in Morocco: case of the Kenitra. *The Pan African Medical Journal*, 35(Suppl 2). DOI:10.1353/etc.2013.0035
- Ansley, B. M., Houchins, D., & Varjas, K. (2019). Cultivating positive work contexts that promote teacher job satisfaction and retention in high-need schools. *Journal of Special Education Leadership*, 32(1), 3–16.
- Atiyat, O. K. (2017). The level of psychological burnout at the teachers of students with autism disorders in light of a number of variables in Al-Riyadh Area. *Journal of Education and Learning*, 6(4), 159–174. DOI:10.5539/jel.v6n4p159
- Banks, S. R., & Necco, E. G. (1990). The effects of special education category and type of training on job burnout in special education teachers. *Teacher Education and Special Education*, 13(3-4), 187–191. DOI:10.1177/08884064900130030
- Baran, G., Bıçakçı, M.Y., İnci, F., Öngör, M., Ceran, A., & Atar G. (2010). Analysis of burnout levels of teacher. *Procedia Soc Behav Sci*, 9: 975–980. DOI:10.1016/j.sbspro.2010.12.270
- Ben-Zur, H., & Michael, K. (2007). Burnout, social support, and coping at work among social workers, psychologists, and nurses: The role of challenge/control appraisals. *Social work in health care*, 45(4), 63–82. DOI:10.1300/J010v45n04_04
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 003465431986249. DOI:10.3102/0034654319862495
- Borgonovi, F., Pokropek, M., & Pokropek, A. (2023). Relations between academic boredom, academic achievement, ICT use, and teacher enthusiasm among adolescents. *Computers & Education*, 200. DOI:10.1016/j.compedu.2023.104807
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and treatment of children*, 681–711. DOI:10.1353/etc.2014.0032
- Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research*, 21(1), 37–47. DOI:10.1002/capr.12360
- Cancio, E. J., Albrecht, S. F., & Johns, B. H. (2013). Defining administrative support and its relationship to the attrition of teachers of students with emotional and behavioral disorders. *Education and Treatment of children*, 71–94. DOI:10.1353/etc.2013.0035
- Chan, S. H., Wan, Y. K. P., & Kuok, O. M. (2015). Relationships among burnout, job satisfaction, and turnover of casino employees in Macau. *Journal of Hospitality Marketing & Management*, 24(4), 345–374. DOI:10.1080/19368623.2014.911712
- Cheng, T. M., Chang, S. Y., & Chan, Y. Y. (2018). I know you are suffering from burnout: The moderated mediation effects of "leisure benefits" and "leisure coping" on the burnout model of flight attendants. *Journal of Air Transport Management*, 71, 119–129. DOI:10.1016/j.jairtraman.2018.06.003
- Chirico, F., Sharma, M., Zaffina, S., & Magnavita, N. (2020). Spirituality and prayer on teacher stress and burnout in an Italian cohort: A pilot, before-after controlled study. *Frontiers in Psychology*, 10, 2933. DOI:10.3389/fpsyg.2019.02933

- Cho, H., Pyun, D. Y., & Wang, C. K. J. (2023). Teachers' work-life balance: the effect of work-leisure conflict on work-related outcomes. *Asia Pacific Journal of Education*, 1–16. DOI:10.1080/02188791.2023.2259113
- Creedy, D. K., Sidebotham, M., Gamble, J., Pallant, J., & Fenwick, J. (2017). Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. *BMC pregnancy and childbirth*, 17, 1–8. DOI:10.1186/s12884-016-1212-5
- Curran, A. (2017). Burnout: Special education teachers experiences with career demands [published doctoral dissertation, Northeastern University - College of Professional Studies]. Northeastern University Library. <https://repository.library.northeastern.edu/>
- Dias, F. S., & Angélico, A. P. (2018). Burnout syndrome in bank employees: a literature review. *Trends in Psychology*, 26, 15–30. DOI:10.9788/TP2018.1-02En
- Duarte, I., Teixeira, A., Castro, L., Marina, S., Ribeiro, C., Jácome, C., ... & Serrão, C. (2020). Burnout among Portuguese healthcare workers during the COVID-19 pandemic. *BMC public health*, 20, 1–10. DOI:10.1186/s12889-020-09980-z
- Emery, D. W., & Vandenberg, B. (2010). Special education teacher burnout and ACT. *International Journal of Special Education*, 25, 119–131.
- Eurydice (2023). *Obrazovanje dece i učenika sa smetnjama u razvoju u specijalnim predškolskim ustanovama i školama*. Retrieved August 27, 2024 from <https://eurydice.eacea.ec.europa.eu/sr/national-education-systems/serbia/obrazovane-dece-i-uchenika-sa-smetnama-u-razvoju-u-specijalnim>
- Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education*, 14(1).
- Garwood J. D., Werts M. G., Varghese C., & Gosey L. (2018). Mixed-methods analysis of rural special educators' role stressors, behavior management, and burnout. *Rural Special Education Quarterly*, 37, 30–43. DOI:10.1177/8756870517745270
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional children*, 67(4), 549–567. DOI:10.1177/001440290106700408
- Gisev, N., Bell, J. S., & Chen, T. F. (2013). Interrater agreement and interrater reliability: key concepts, approaches, and applications. *Research in Social and Administrative Pharmacy*, 9(3), 330–338. DOI:10.1016/j.sapharm.2012.04.004
- Gong, T., Zimmerli, L., & Hoffer, H. E. (2013). The effects of transformational leadership and the sense of calling on job burnout among special education teachers. *Journal of School Leadership*, 23(6), 969–993. DOI:10.1177/105268461302300
- González-Valero, G., Gómez-Carmona, C. D., Bastida-Castillo, A., Corral-Pernía, J. A., Zurita-Ortega, F., & Melguizo-Ibáñez, E. (2023). Could the complying with WHO physical activity recommendations improve stress, burnout syndrome, and resilience? A cross-sectional study with physical education teachers. *Sport Sciences for Health*, 19(1), 349–358. DOI:10.1007/s11332-022-00981-6
- Hart, A. (2009). The Burnout Checklist. *Arcadia, California*, 5(06), 2016.
- Hester, O. R., Bridges, S. A., & Rollins, L. H. (2020). "Overworked and underappreciated": special education teachers describe stress and attrition. *Teacher Development*, 1–18. DOI:10.1080/13664530.2020.1767189
- Jodra, P., & Domínguez, R. (2020). Effects of physical activity on the perceived general health of teachers. *International Journal of Medicine & Science of Physical Activity & Sport*, 20(77), 155–166. DOI:10.15366/rimcafd2020.77.010

- 📖 Jovanović, V. (2020). Ispitivanje uticaja protektivnih i faktora rizika na sindrom izgaranja nastavnika koji realizuju nastavu u redovnim i školama za intelektualno ometenu decu (Investigation into the impact of protective and risk factors on burnout syndrome of teachers working in regular schools and schools for children with intellectual disability) [published doctoral dissertation, University of Kragujevac - Faculty of Medical Sciences]. National Repository of Dissertations in Serbia. <https://nardus.mpn.gov.rs/handle/123456789/18245>
- 📖 Jovanović, V. R., Hinić, D., Džamonja, I. T., Stamatović, G. B., Gajić, T., & Mihajlović, G. (2021). Individual-psychological factors and perception of social support in burnout syndrome. *Vojnosanitetski pregled*, 78(9), 944-954. DOI:10.2298/VSP190820004J
- 📖 Jovanović, V. R., Karić, J., Hinić, D., Stojanović, G., Džamonja Ignjatović, T., & Mihajlović, G. (2019a). Sindrom izgaranja defektologa zaposlenih u školama za decu sa smetnjama u razvoju. [Burnout syndrome in special education teachers working with children with developmental disorders]. *Engrami*, 41(2), 21-33. DOI:10.5937/engrami1902021J
- 📖 Jovanović, V., Karić, J., Mihajlović, G., Džamonja-Ignjatović, T., & Hinić, D. (2019b). Work-related burnout syndrome in special education teachers working with children with developmental disorders—possible correlations with some socio-demographic aspects and assertiveness. *European Journal of Special Needs Education*, 34(5), 692-701. DOI:10.1080/08856257.2019.1572092
- 📖 Kaffemanienė, I., Tomėnienė, L., & Verpečinskienė, F. (2021, May). Teachers' cooperation with parents of students with special educational needs. In *Society. Integration. Education. Proceedings of the International Scientific Conference* (Vol. 3, pp. 51-64). DOI:10.17770/sie2021vol3.6454
- 📖 Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen burnout inventory: A new tool for the assessment of burnout. *Work & stress*, 19(3), 192-207. DOI:10.1080/02678370500297720
- 📖 Küçüksüleymanoğlu, R. (2011). Burnout syndrome levels of teachers in special education schools in Turkey. *International Journal of Special Education*, 26, 53-63.
- 📖 Landers, R. (2023). Computing intraclass correlations (ICC) as estimates of interrater reliability in SPSS. *Authorea Preprints*. DOI:10.15200/winn.143518.81744
- 📖 Leiner, D. J. (2020). SoSci Survey (Program Version 3.2.06) [Computer software]. Available at <http://www.sosicisurvey.com>
- 📖 Lin, Y. S., Huang, W. S., Yang, C. T., & Chiang, M. J. (2014). Work-leisure conflict and its associations with well-being: The roles of social support, leisure participation and job burnout. *Tourism Management*, 45, 244-252. DOI:10.1016/j.tourman.2014.04.004
- 📖 Maslach, C., Jackson, S., & Leiter, M. (1997). The Maslach Burnout Inventory Manual. In C. P. Zalaquett, & R. J. Wood (Eds.), *Evaluating Stress: A Book of Resources* (pp. 191-218). The Scarecrow Press.
- 📖 Maslach, C., & Jackson, S. E. (1985). The role of sex and family variables in burnout. *Sex roles*, 12, 837-851.
- 📖 Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111. DOI:10.1002/wps.20311
- 📖 Mijatović, L., & Strizak, N. (2023). Emocionalna inteligencija kao crta ličnosti i profesionalno sagorevanje vaspitača [Emotional Intelligence as a Personality Trait and Burnout among Preschool Teachers]. *Nastava i vaspitanje*, 72(2), 153-168. DOI:10.5937/nasvas2302153m
- 📖 Nikolić, G., Đorđić, M. D., & Kovačević, J. M. (2019). Mesto specijalnih škola u inkluzivnom obrazovanju [The Place of Special Schools in Inclusive Education]. *Zbornik radova Filozofskog fakulteta u Prištini*, 277-297. DOI:10.5937/ZRFFP49-19176

- 📖 Nuri, C., Demirok, M. S., & Direktör, C. (2017). Determination of Self-Efficacy and Burnout State of Teachers Working in the Special Education Field in Terms of Different Variables. *Journal of Education and Training Studies*, 5(3), 160–166.
- 📖 Olivier, M. A. J., & Williams, E. E. (2005). Teaching the mentally handicapped child: Challenges teachers are facing. *International Journal of Special Education*, 20(2), 19–31.
- 📖 Ozmen, F., Akuzum, C., Zincirli, M., & Selcuk, G. (2016). The communication barriers between teachers and parents in primary schools. *Eurasian Journal of Educational Research*, 66, 26–46. DOI:10.14689/ejer.2016.66.2
- 📖 Park, E.Y., & Shin, M. (2020). A Meta-Analysis of Special Education Teachers' Burnout. *Sage Open*, 10(2). DOI:10.1177/2158244020918297
- 📖 Pearson, M., Clavenna-Deane, B., & Carter, K. S. (2015). Job Attitudes of Special Educators Related to Inclusion of Students with Significant Disabilities. *International Journal of Special Education*, 30(2), 81–93.
- 📖 Popov, S., & Stefanović, B. (2016). Sindrom izgaranja i kognitivna emocionalna regulacija u profesiji defektologa [Burnout syndrome and cognitive emotion regulation among special education professionals]. *Tematski Zbornik radova međunarodnog značaja "Inkluzivna teorija i praksa"*, 284–291.
- 📖 Prince, A. (2018). The Perils of Job Burnout. *International Education & Research Journal*, 4(7), 13–15.
- 📖 Pyhältö, K., Pietarinen, J., & Salmela-Aro, K. (2011). Teacher–working-environment fit as a framework for burnout experienced by Finnish teachers. *Teaching and teacher education*, 27(7), 1101–1110. DOI:10.1016/j.tate.2011.05.006
- 📖 Rajšli-Tokoš, E. I. (2023). Evaluacija ciljeva individualnog obrazovnog plana i akademski uspeh učenika sa invaliditetom u srednjoj školi (Evaluation of individual education plan goals and academic achievement of students with disabilities in high school) [published doctoral dissertation, University of Belgrade - Faculty of Special Education and Rehabilitation]. National Repository of Dissertations in Serbia. <https://nardus.mpn.gov.rs/handle/123456789/22574>
- 📖 Randelović, K., & Stojiljković, S. (2015). Work climate, basic psychological needs and burnout syndrome of primary school teachers and university professors. *TEME: Časopis za društvene nauke*, 39(3), 823–844.
- 📖 Rapaić, D., Nedović, G., Ilić, S., & Stojković, I. (2008). Zakonski okvir i inkluzivna praksa. [Legal Framework and Inclusive Practice]. U D. Radovanović (ur.). U susret inkluziji-dileme u teoriji i praksi (str. 9–27). Fakultet za specijalnu edukaciju i rehabilitaciju
- 📖 Ruisoto, P., Ramírez, M. R., García, P. A., Paladines-Costa, B., Vaca, S. L., & Clemente-Suárez, V. J. (2021). Social support mediates the effect of burnout on health in health care professionals. *Frontiers in Psychology*, 11, 623587. DOI:10.3389/fpsyg.2020.623587
- 📖 Santoro, D. A. (2018). *Demoralized: Why teachers leave the profession they love and how they can stay*. Harvard Education Press.
- 📖 Seiler Zimmermann, Y., & Wanzienried, G. (2019). Are homeowners happier than tenants? Empirical evidence for Switzerland. *Wealth (s) and subjective well-being*, 305–321. DOI:10.1007/978 3 030 05535 6_14
- 📖 Sharp Donahoo, L. M., Siegrist, B., & Garrett-Wright, D. (2018). Addressing compassion fatigue and stress of special education teachers and professional staff using mindfulness and prayer. *The Journal of School Nursing*, 34(6), 442–448. DOI:10.1177/10598405177257
- 📖 Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teach. Teach. Edu.* 25 (3), 518–524. DOI:10.1016/j.tate.2008.12.006

- 📖 Squillaci, M., & Hofmann, V. (2021). Working in inclusive or non-inclusive contexts: Relations between collaborative variables and special education teachers' burnout. *Frontiers in Education*, 6. DOI:10.3389/feduc.2021.640227
- 📖 Stanley, S., & Sebastine, A. J. (2023). Work-life balance, social support, and burnout: A quantitative study of social workers. *Journal of Social Work*, 23(6), 1135–1155. DOI:10.1177/146801732311979
- 📖 Syed, M., & Nelson, S. C. (2015). Guidelines for establishing reliability when coding narrative data. *Emerging Adulthood*, 3(6), 375–387. DOI:10.1177/2167696815587648
- 📖 Taranu, S. M., Ilie, A. C., Turcu, A. M., Stefanu, R., Sandu, I. A., Pislaru, A. I., ... & Alexa-Stratulat, T. (2022). Factors associated with burnout in healthcare professionals. *International Journal of Environmental Research and Public Health*, 19(22), 14701. DOI:10.3390/ijerph192214701
- 📖 Van Dierendonck, D., Garssen, B., & Visser, A. (2005). Burnout prevention through personal growth. *International journal of stress management*, 12(1), 62. DOI:10.1037/1072-5245.12.1.62
- 📖 Vercambre, M. N., Brosselin, P., Gilbert, F., Nèrière, E., & Kovess-Masféty, V. (2009). Individual and contextual covariates of burnout: A cross-sectional nationwide study of French teachers. *BMC Public Health*, 9 (333). DOI:10.1186/1471-2458-9-333
- 📖 Wasburn-Moses, L. (2005). How to Keep Your Special Education Teachers. *Principal Leadership* 5(5), 35–38.
- 📖 WHO (2019). Burnout an "occupational phenomenon": International Classification of Diseases. Geneva: World Health Organization. Available: <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>
- 📖 Wong V. W., Ruble L. A., Yu Y., & McGrew, J. H. (2017). Too stressed to teach? Teaching quality, student engagement, and IEP outcomes. *Exceptional Children*, 83, 412–427. DOI:10.1177/0014402917690729
- 📖 Yorulmaz, Y. İ., & Altinkurt, Y. (2018). The examination of teacher burnout in Turkey: A meta-analysis. *Turkish Journal of Education*, 7(1), 34–54. DOI: 10.19128/turje.348273
- 📖 Zakon o osnovama sistema obrazovanja i vaspitanja [Law on the Foundations of the Education System (2023). *Službeni glasnik RS*, Br. 92/2023.
- 📖 Zarafshan, H., Mohammadi, M. R., Ahmadi, F., & Aarsalani, A. (2013). Job burnout among Iranian elementary school teachers of students with autism: a comparative study. *Iranian Journal of Psychiatry*, 8, 20–27.
- 📖 Zavod za unapređivanje obrazovanja i vaspitanja [Institute for the Improvement of Education (2018). *Obrazovno-vaspitne ustanove za decu i učenike sa smetnjama u razvoju u Srbiji*. Retrieved August 27, 2024 from <https://zuov.gov.rs/obrazovno-vaspitne-ustanove-za-decu-i-ucenike-sa-smetnjama-u-razvoju-u-srbiji/>
- 📖 Žganec, N. (1999). Etika pomažućih profesija-primjer socijalnog rada [Ethics of Helping Professions - Social Work Example]. *Ljetopis socijalnog rada*, 6(1), 17–27.

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