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Beyond the Edge of Exhaustion: Redefining the Concept of School Burnout Syndrome Through Qualitative Reexamination of Secondary School Students' Experiences

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Abstract

School burnout syndrome is typically defined through exhaustion from academic demands, cynicism toward school, and feelings of inadequacy as a student, identically as occupational burnout syndrome. This approach neglects the context of education, while equating it with formal employment, overlooking differences between the status of a student and a worker. Therefore, this study aimed at better understanding diverse aspects of school burnout and its contextual risk factors in order to provide a more comprehensive conceptualization of this phenomenon. Methodologically relying on the grounded theory approach and conceptually on Bronfenbrenner's ecological model, we conducted and analyzed 25 semi-structured individual interviews with Serbian secondary school students that exhibited high scores on the School Burnout Inventory. Five interconnected main themes emerged: Loss of meaning, Intense emotional reactions and states, Perceived incompetence triggered by comparison with classmates, Guilt-induced withdrawal, and Impaired physical health. External factors included Unsupportive and pressuring family and Disengaged teachers. Finally, alongside advocating for preventative measures, such as educational policy and practice changes, we offer a novel theoretical conceptualization of school burnout syndrome. We also argue that the emergence of school burnout syndrome is not an individual's collapse stemming from inner limitations, but a symptom of systemic deficiencies within the educational system.

Keywords School burnout · Students · Risk factors · Qualitative study · Family · Teachers

Introduction

Although the concept of burnout originates from the occupational literature (see e.g. Maslach et al., 2001), in the last 20 years it has been extended to university students (see e.g. Schaufeli et al., 2002) and to secondary school students (see e.g. Salmela-Aro et al., 2008a, 2008b). Studies with students suggest that, similar to work, the school represents a context where individuals experience chronic stress due to requirements and achievement pressures they cannot always

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² Institute of Psychology, University of Belgrade, Faculty of Psychology, 18-20 Čika Ljubina, 11000 Belgrade, Serbia successfully meet (Dupéré et al., 2015; Salmela-Aro et al., 2009a, 2009b).

Current understandings of school burnout syndrome, however, seem to overlook the differences between the school and the workplace, as well as developmental differences and different positions and power of underaged students and adult workers in society. This means that from a theoretical point of view more comprehensive and detailed exploration of this concept is needed. Knowing that burnout is associated with symptoms of depression and anxiety, greater screen time, general school maladjustment, a higher risk of dropout, risky behaviors, and underachievement (Covington, 2000; Fimian & Cross, 1986; Fiorilli et al., 2017; May et al., 2015; Räsänen et al., 2015; Salmela-Aro & Upadyaya, 2014a; Salmela-Aro et al., 2017), from the practical point of view, it is relevant to investigate in more detail different aspects of school burnout so it can be more quickly recognized and more effectively addressed. In addition to manifestations of the phenomenon itself, it is also important to understand the context, that is, external factors which contribute to increase or decrease in levels of one's burnout.

Concept of School Burnout and Risk Factors

Based on seminal work of Maslach and associates (Maslach & Leiter, 1976, 2016), in the occupational context burnout has been defined in terms of exhaustion, depersonalization, and decreased personal accomplishment due to inadequate organization of work, a high workload and lack of resources to accomplish all tasks and was typically measured with Maslach Burnout Inventory (MBI). Nonetheless, there have been studies that brought the validity of the threefactor model in question (e.g. Bianchi et al., 2015; de Beer & Bianchi, 2019). Recent studies on occupational burnout that applied a bottom-up, qualitative approach and showed that the burnout is more complex concept, involving exhaustion, anxiety, indifference, depression, irritability and anger, lack of motivation, executive functioning issues, reduced performance, and withdrawal from others (Tavella & Parker, 2020), and even empathy loss (Tavella et al., 2021).

School burnout syndrome is defined as a chronic stress response in students which results from a discrepancy between students' resources and expectations (either their own or imposed by others) for their success in academic context (Frydenberg & Lewis, 2004; Salmela-Aro et al., 2009a). Like the concept of burnout stemming from the occupational context, school burnout is currently operationalized through three components: exhaustion due to study demands, cynical attitude toward school, and feelings of inadequacy or low self-efficacy as a student (Salmela-Aro et al., 2009a, 2009b). It is a broader term than school or academic stress, referring to a more complex (and exclusively adverse) reaction to prolonged stress. It should also be differentiated from depression and anxiety due to its context-specific nature, which among others, refrained clinicians from considering it a medical condition or a diagnosis and including it in DSM-V (Simonsen et al., 2023).

Like MBI, the most commonly used measure—School Burnout Inventory (SBI) captures these three components (Salmela-Aro et al., 2009b). Although studies conducted in different contexts suggest validity and reliability of SBI (e.g. Carmona-Halty et al., 2022), there are also voices about the need to revise this conceptualization and ways of assessment. For instance, Sever & Aypay point out that, unless they are vocational schools, there is no direct correlation between work and high schools. They also believe that the current method of assessment leads to inconsistent results in the literature on school burnout (Sever & Aypay, 2015).

Studies showed that some personality characteristics make individuals more susceptible to burnout—for example, poor emotional regulation and self-control (Seibert et al., 2016), poor self-image and emotion-oriented coping (Slivar, 2001). On the other hand, resilience and grit (Tang et al., 2021), as well as problem-oriented coping strategies (Yusoff, 2010), act as protective factors.

In addition to personal, individual factors, external, school-related factors, such as negative school and classroom climate (Salmela-Aro et al., 2008a), inappropriate workloads or assignments, high academic pressure and expectations set to students without adequate recompenses for high achievement, and inappropriate treatment by teachers (Meylan et al., 2020; Murberg & Bru, 2003; Slivar, 2001; Yusoff, 2010) are associated with school burnout. Some demonstrate that female students are at higher risk of burnout (Salmela-Aro et al., 2008a), while others suggest that the main cause of burnout in the female population was academic pressure, while for males it was relationship with parents and teachers (Murberg & Bru, 2003). Type of school and, presumably, accompanying expectations set to students proved to play a role, as well-students pursuing academic track tend to experience more exhaustion than those in vocational schools (professional track); similarly, cynicism and feelings of inadequacy tend to increase after transitioning to high school for adolescents on academic tracks, while they decrease when transitioning to vocational tracks (Salmela-Aro et al., 2008b).

At the peer level, students who perceive higher levels of classroom structure and peer support tend to adopt engagement and support-seeking coping mechanisms, which consequently lead to lower levels of burnout (Shih, 2015). At the family level, frequent conflicts, family concerns and poor relationships with parents (Aypay & Eryılmaz, 2011; Murberg & Bru, 2003; Slivar, 2001), perceptions of helicopter parenting, especially by fathers (Love et al., 2020), as well as high expectations from parents (Slivar, 2001) proved to be associated with school burnout.

Present Study

Despite the proliferation of studies on school burnout in the last years, there are still not enough studies that can offer a full understanding of this concept. One of the limitations of almost all previous studies is their full compliance with the definition of school burnout proposed by Salmela-Aro and associates (2008a, 2008b, 2009a, 2009b, 2014b) and exclusive use of the School Burnout Inventory (SBI). Namely, this definition of school burnout is rooted in the definition of burnout in the occupational context and equates doing school-related tasks with doing a job, overlooking differences between the context of school and work and the status and power of a student and a worker. There have been voices that pointed to the limitations of considering school and work context as equal, except for vocational schooling which implies a lot of practice and close ties with the world of work (see e.g. Sever & Aypay, 2015). Moreover, recent studies on occupational burnout demonstrated its more complex nature (Tavella & Parker, 2020; Tavella et al., 2021), which implies that the definition of school burnout could be improved as well. In the current definition of school burnout, and subsequently in the items comprising the SBI, the emphasis is placed exclusively on the relationship between students and school duties, and the relational aspects of schooling are neglected. Given the specificities of adolescence, such as intense relationships with parents and peers simultaneously and their influence on the individual's values and behavior, including school-related values and habits (Choice, 2003), we assume that school burnout is not only about schoolwork, but all these relations that might overwhelm an individual.

With the idea to better understand the aspects of school burnout and external risk factors, we decided to conduct a qualitative study with secondary school students, being grounded in the interpretative paradigm (Willig, 2008). While there were qualitative studies that addressed teacher and principal burnout (see e.g. Arvidsson et al., 2019; Depolli Steiner, 2017; Mota et al., 2021), there have been no studies that more deeply explored the phenomenon of students' school burnout applying qualitative methods, more specifically-grounded theory (Charmaz, 2014; Strauss & Corbin, 1990). Therefore, our main aim was to offer a more precise and comprehensive definition of school burnout by exploring its inherent aspects and external risk factors, as well as the interconnectedness between them. This can further enable us to provide recommendations for potential improvement of instruments that could be used for its assessment by exploring secondary students' experience of school burnout and understanding personal and external factors that contribute to its development.

Method

Context

Although we strive to provide a conceptualization of burnout applicable in different contexts, we assume that specificities of the Serbian sociopolitical and educational landscape might color some results. In line with Bronfenbrenner's ecological systems theory (1979), specific time when research was conducted need to be considered when interpreting individual's inner states and behavior.

With a long-standing aspiration for European Union accession, Serbia has adjusted its educational policies to reflect the values such as democracy, participation, and inclusion; however, there are still many challenges in providing quality education for all, such as insufficient teachers' competencies and centralized curriculum at each educational level, among others (Pešikan & Ivić, 2021; Vasić, 2019). Although the major policies stress the importance of developing socioemotional and civic competencies in schools, teachers, parents, and media put much more stress on academic achievements. Unfavorable sociopolitical situation, with rising social inequalities (Cvetičanin et al., 2021), promotes the culture of comparison, competition, power demonstration, and corruption even more. This leads toward tensions between parents and teachers, where teachers turn out to be in a subordinate position due to the degraded status of this profession in the last years (Simić, 2019).

These unfavorable conditions have additionally been jeopardized due to COVID-19 pandemic and transition to emergency remote education (ERE). Poor technical resources in schools and in students' homes, insufficiently developed students' and teachers' digital competence, and lack of the system's psychological and professional support to school staff resulted in students' knowledge gap and many negative socioemotional outcomes in students, parents, and teachers (UNICEF, 2020a, 2020b, 2021). Scholars in Serbia agree that the pandemic has just accentuated pre-existing deficiencies in the educational system (Institute of Psychology, 2022).

Participants and Procedure

Recognizing that the most reliable narrators regarding the phenomenon of school burnout are exclusively students who have undergone such experiences firsthand, our initial endeavor entailed the identification of individuals who have encountered school burnout. Therefore, we contacted secondary schools and institutions that could help us reach out to students and distribute the questionnaire consisting of the questions addressing sociodemographic variables (gender, age, school type, and grade) and the SBI. Despite previous reservations regarding the effectiveness of the SBI in assessing the school burnout, it has nonetheless been identified as the most suitable instrument for selecting students for the main research phase, that is, it stood as the most reliable proxy measure of school burnout at our disposal.

Following a back-translation procedure we made subtle adjustments by substituting certain words with their synonyms with the intent of aligning the language more closely with expressions commonly used by youth whose native language is Serbian. Given that the SBI is not a standardized measuring tool, we decided to use the average score (M = 17.76) and standard deviation $(SD = \pm 7.251)$ to select participants for the main research phase.¹ All participants whose overall mean scores were above two standard

¹ This mean and standard deviations were determined in one of previous studies done by May and associates (May et al., 2015) that was conducted on a sample similar to ours.

deviations, i.e. above 32.6, meaning they were high on all three aspects of burnout (as defined by Salmela-Aro et al., 2009a, 2009b) were considered for our main, qualitative research phase.

After informed consents were obtained, 219 secondary school students from various regions of Serbia filled out the SBI. The survey was conducted in the post-COVID period, right after all schools started working regularly. It was anonymous, but at the end of the questionnaire, participants were offered to leave their email addresses, only if they wanted to participate in the second research phase. Those participants who left their emails and had overall scores on SBI higher than two standard deviations were invited for an interview which occurred within the subsequent month.

Adhering to the principle of theoretical saturation (Glaser & Strauss, 1967) a total of 25 participants were interviewed (M_{age} = 17.36 years, 80% female)—14 secondary school seniors, 5 juniors, 3 sophomores, and 3 freshmen. The majority of them (19 participants) were enrolled in high schools (gymnasiums—academic track), four participants attended vocational schools (vocational track), and the remaining two were attending gymnasium and music secondary school at the same time.

The Interview Protocol and Data Collection

Knowing from previous qualitative research of occupational burnout experience that certain sensitive themes can emerge in interviews (Tavella & Parker, 2020), we assumed that the students' experience of school burnout would also consist of some highly sensitive topics that would be too uncomfortable for students to share with a group. Therefore, we opted for semi-structured individual interviews.

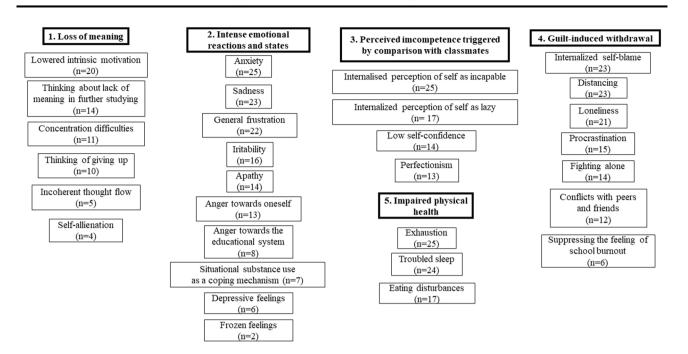
For the interview protocol we extracted different themes and specific questions that the researchers used in previous qualitative studies on occupational burnout with teachers, nurses, and other health workers (Abellanoza et al., 2018; Arvidsson et al., 2019; Cherniss, 1992; Friganović et al., 2019; Jacobson, 2016; McNeill et al., 2017; Ringrose et al., 2009) and adapted the questions to be suitable for the school context. We relied on Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979) and addressed both the students' microsystem and the macrosystem in the interviews, paying attention to processes and time, as well.

Questions covered key aspects of school burnout syndrome: cognitive, emotional, behavioral, and physiological, as well as some external factors contributing to school burnout syndrome (see "Appendix"). At the beginning, we asked students if they were familiar with the concept of school burnout. After they shared their personal definitions of school burnout, we provided some additional explanations of this phenomenon to make sure students will narrate about school burnout and not some similar concepts. Firstly, we asked them to describe their previous burnout experiences and to recall periods where burnout was most noticeable, so we could gain insight into its temporal features. Then we examined the family dynamics, focusing on the role of familial relationships and the level of support received from family members. Similarly, we explored the impact of peer relationships on school burnout, along with the perceived level of support from friends. Inquiries concerning potential school-related elements that can contribute to burnout were made. Moving on from external factors to aspects of school burnout experience, we investigated cognitive aspects to understand the thought patterns, as well as beliefs about oneself and others. We also looked at the most expressed emotions and behavioral changes. Lastly, we focused on physiological aspects, examining overall physical health. Knowing from previous research that COVID-19 pandemic had a significant influence on students' school burnout (Simoës-Perlant et al., 2022), and given that we conducted research a few weeks after the schools in Serbia started to work regularly, we paid attention to potential ways the pandemic itself and ERE colored the experience of school burnout. The interviews lasted between 30 and 60 min each and were conducted in quiet places. With students' informed consents interviews were recorded and then verbatim transcribed for further analyses.

Data Analysis

Given that we aimed at generating a new conceptualization of school burnout, and had data taken from real life at hand, we opted for grounded theory (Charmaz, 2014; Strauss & Corbin, 1990; Glasser & Strauss, 1967). The overall analysis was done in the ATLAS.ti program for qualitative analysis.

The first author started with open coding after several interviews had been transcribed. Analysis was not prescriptive and the process included categorization of units, interpreting them and even regrouping them in a logical and meaningful way. After the first author applied first open and then axial coding with approximately half of the data, the second author joined in order for intercoder agreement to be achieved, which resulted in slight modification of the original coding scheme. However, given it was an iterative process the scheme has been changed several times. Since we started from the current definitions of the phenomenon, we used the Tabula Geminus approach (Kreiner, 2015). Final coding scheme consisted of aspects, immanent characteristics of burnout, and the external factors that make it easier for burnout to develop that we presented through the concept maps (Sosa-Díaz & Valverde-Berrocoso, 2022). In addition, co-occurrence analysis enabled us to provide assumptions about the relationship between certain external factors and aspects of burnout. These analyses enabled us to develop a new theory that is grounded in thick data and consistent,



Aspects of the school burnout experience

Fig. 1 Main themes and subthemes referring to aspects of the school burnout syndrome

that is, a comprehensive conceptualization of a complex phenomenon of school burnout syndrome.

Results

Aspects of School Burnout

Altogether, seven main themes with three to ten subthemes each emerged from the analysis (see Fig. 1). Each theme emerged in every interview, with slight and negligible variations in frequency of some subthemes. There were quantitative differences in school burnout experience between male and female participants—girls had more pronounced symptoms than boys. However, during qualitative observations, the core characteristics of the school burnout experience are the same between the sexes. We present a thorough explanation and interpretation of our findings, along with relevant citations below.

Loss of Meaning

The theme *loss of meaning*, with its six subthemes, emerged as a key cognitive and motivational component of the experiences of the secondary school students, shedding light on the different ways in which their relationship to learning gets stressed, contributing to the overarching sense of separation and exhaustion. Loss of intrinsic motivation highlights how expressions of excitement and eagerness to learn, along with former sources of inspiration and curiosity, appeared to have been replaced by a sense of apathy and detachedness, along with an unwillingness to learn: "My motivation to study has completely dropped... I just worked as hard as I needed to pass and get through." For them, education has transformed from a source of personal fulfillment to a source of distress, which indicates a profound alteration in their relationship with learning itself—they have no enthusiasm to learn anymore. In their own words: "I learn more out of a guilty conscience, than I learn out of sheer pleasure".

The subtheme *thinking about lack of meaning in further studying* suggests that students are questioning the importance of their current studies in defining their future and are ambiguous about how their efforts now relate to their later life. As one participant put it: "I think about how none of it makes sense, how I feel that my work and effort have literally nothing to do with anything that will benefit me later in life". This sense of disillusionment and uncertainty about the worth of their educational journey often resulted from the idea of continuing their studies at higher educational levels: "I don't know which subject to focus on. I'm thinking there's no point in trying so hard."

Participants reported *concentration difficulties* while studying, frequently finding their minds wandering, which hampered their capacity to acquire knowledge and engage with their assignments efficiently: "It happens that I read some things four, five times and I still don't understand them". This subtheme highlighted the complex relationship between decreasing interest and degraded cognitive functioning, with one participant saying that she "just stares blankly at the paper" and that "her brain just shuts down".

Many participants expressed their *thoughts of giving up*, abandoning their studies entirely, which were caused by the demands of education, along with the sense of defeat and hopelessness: "I don't have the strength to study anymore, I can't sit for five hours and look at a book for seven days in a row, I can't do it anymore...I literally feel like I can't look at the math book, it disgusts me." expressed one of the participants. A crucial aspect of this subtheme is identifying the specific moment when students reach their utmost level of exhaustion, which seems to act as a breaking point, leading to the onset of burnout. In spite of this, they say: "At one moment, I just can't. I think "Oh, I can't do this anymore, I'm going to quit this" but I never do. I just think that." Given that most of the participants in our sample were hardworking, high achievers, it is notable that such ideas occur but never result in action.

In addition to difficulty concentrating, participants typically reported an *incoherent thought flow*. Participants struggled to explain their ideas logically and present their thoughts with the clarity and effectiveness they once possessed, which only added to their frustrations and made expressing oneself even more difficult. As a participant stated: "At some point, I lost my regular train of thought, I caught myself putting off my thoughts for later".

Students report a sense of *self-alienation* and estrangement from their own educational experience and even their own identity, both academic and personal: "I started not to recognize myself in the mirror". This indicates an increasing gap between their genuine selves and the roles they felt obligated to perform inside the educational framework and the mismatch between internal desires and external expectations, which arose from the notion that they were only playing a role of a student rather than actively participating in their learning: "I'm somehow more crushed, I'm not all myself. Mom would sometimes comment, she would joke that "I'm not the same child", but I didn't take it as a joke at that time".

Intense Emotional Reactions and States

As a complement to previous cognitive and motivational aspects of the burnout, the theme *Intense emotional reactions and states*, with its ten subthemes, serves as a window into the complex emotional terrain these students navigate within the educational realm.

The subtheme *anxiety*, present in all interviews, refers to chronic concern, uneasiness, and fear caused by rigorous academic obligations. "Overthinking" and "panicky thoughts" about one's failure and the future appear frequently: "The closer I get to class, the harder it is to breathe, the more nervous I am. I am completely confused and lost." It is worrying that many of them have noticeable night anxiety," which is when heart palpitations and chest pain appears". They attribute it to constant worrying about the challenges of the day ahead, especially if an examination is involved. Excessive crying is also frequently described: "Just that day, when I cried 20 times, at one point I could hardly breathe at home, I was literally gasping for air.".

Some students suffer from waves of *sadness* and frequently feel "disappointment and despondency"—that stems from the gradual deterioration of the original passion and curiosity that fueled their quest for knowledge.

Students reported about continuous *general frustration*, which reveals how academic expectations frequently outweigh personal capabilities. As one participant described it: "I was mad about everything possible...I was angry at everything and everyone".

Students narrated about increased *irritability*, as they demonstrated heightened sensitivity to stressors in their environment. They are "impossible to be around" and "uncomfortable to communicate with". Its consequences are evident in their personal relationships: "I can be rude to people without any intention and in some moments, I don't have that spark which makes me happy". Mostly, these outbursts are unintentionally aimed toward family members: "They do the stupidest little thing, and I totally freak out and start yelling at them."

Apathy refers to complete detachment and disengagement from one's academic experience, loss of interest, and desire in anything. "I'm normally quite positive, but when I'm burnt out, I talk less, I shut down a bit and I just don't care." said one student. Another consequence of this apathy is neglecting personal looks and even hygiene: "I don't care, I literally start looking like garbage. I am too lazy to dress up". Others offer an insight into numbness: "I'm mostly kind of a straight line. I just wouldn't do anything. I'm not mad or anything, just a straight line."

Anger toward oneself highlights the internal battle between self-imposed pressures and the drive for self-worth: "I am mad at myself. I think about how I allowed myself to get to that stage where everything started to get out of my control or how I allowed myself not to think about it earlier".

Subsequently, they also feel *anger toward the educational system*. Students cope with an educational structure that frequently appears rigid, impersonal, and dissonant with their unique requirements, as one student put it: "Some things just don't work for me, and I have to learn them and they have to be included in my GPA, which is not a good measure at all to tell who is good for what and who is worth how much. I am not my grades", while another one complained: "The whole school system is very bad and very difficult and careless. I believe that in general the school has no understanding for us and for mental health of young people."

As a result of constant tension, some students reported *situational substance use as a coping mechanism*. In terms of alcohol use, one participant stated that she "came drunk to the exam". When students were using marijuana, it was to "escape the responsibilities" and calm down after a stressful day. Regarding energy drinks, one student said: "Even though I am familiar with the effects, I am so burnt out, that I need any caffeine, any energy I can get". Antidepressant use was also mentioned. One student said it was "without anyone's knowledge", indicating that he knew it was not an appropriate coping strategy, but that he was desperate to feel better.

The subtheme of *depressive feelings* also appeared, as one student put it: "It represents a borderline depressive state for me. It is difficult to get to it, but also difficult to get out of. It is a state in which it is difficult to work, but easy to think.... And if you do work, you feel like you're ripping it out of yourself with pliers".

In contrast, *frozen feelings* occur as an emotional reaction that serves as a shield against burnout's overwhelming pressures. As one student put it: "The most pronounced would be my inability to express any emotions".

Perceived Incompetence Triggered by Comparison with Classmates

This theme reveals the undercurrents that emerge when students become involved in a never-ending cycle of selfevaluation, defining their value by the accomplishments and perceived triumphs of their classmates.

All participants revealed an internalized perception of self as incapable, which was typically fueled by constant self-comparisons. One participant said: "Although I am an excellent student, I thought about how I would fail this year. I also thought that I was a disappointment to other people", while another one was using negative self-talk, saying: "You are worth nothing. You're not going to make it.". This subtheme emphasizes the tremendous role of self-perception in burnout, as students internalize external success criteria and compare their value to those around them. "From the beginning of high school, I knew—"If you mess up here, you won't succeed, say goodbye to your idea of enrolling in anything."-said one of the participants. One participant stated that his parents perceived exceptional accomplishment as something average and easily attainable: "I was taught to think that anyone can achieve academic success. I feel like I'm worse than others. It is a feeling of inferiority, especially in class".

Students often described instances in which they believed their efforts paled in contrast to those of their friends—the subtheme we named *Internalized perception of self as lazy*: "When someone knows something in class and if they get a good grade, then I feel bad, because that could be me too, if only I wasn't lazy. I know I can, but what's stopping me? Well, that I was either lazy or that I didn't study enough. Mostly I think I'm lazy". One participant even says that she does not like sleeping in, because "it will ruin her productivity for the whole day".

Participants expressed *low self-confidence*, especially those who had issues with self-image before, so external academic pressures just triggered those feelings again: "I felt insecure about the way that I talk and the way that I look". However, as we previously mentioned, most students equate their worth with their grades. As those grades drop, their confidence disappears: "I consider myself smart, but then something goes wrong and I doubt whether I can really do it...I feel worthless and bad, because I didn't get that good grade".

Perfectionism arises as a prominent response to the culture of comparison, indicating the internalization of unattainable ideals and an unwavering quest for perfection: "I don't think the teachers expect as much from me as I think they expect from me. I put more pressure on myself than I have to. I like to do my assignments so that they are perfect...It's not about the teacher but more about the fact that I think I need to push myself to attain an okay grade" explained one participant.

Guilt-Induced Withdrawal

This theme reveals a story of how emotions of guilt, frequently stemming from perceived inadequacies and unmet expectations, result in a complex withdrawal from the academic and overall environment. Seven subthemes referring to emotional and behavioral aspects of burnout were identified.

Internalized self-blame is a subtheme that shows how students frequently exhibited a sense of responsibility for their perceived shortcomings and utilize shame to judge their academic achievement: "And then sometimes my thoughts go in that direction, like, "It's my fault, I don't try hard enough." If I had invested more time, I would have succeeded.". One participant says that she thinks she is a disappointment to other people because of the sole fact that she even burnt out, which leads to even worse burnout—leaving her feeling as if she is in a "vicious circle".

Participants frequently noted a trend of *distancing* from school, extracurricular activities, family, and friends. One participant said: "I'm quite talkative at school, around those I know, and then at one point, when I burn out, I just withdraw into myself and keep quiet.... I'm not there mentally, just physically". They stay away from their friends due to an overwhelming sense of guilt because they are not studying at the moment: "When they ask me out, a series of my refusals

begins, regardless of who asks me...I would reject them all, even birthdays". This subtheme exposes the cost of guilt as students deal with internal conflicts and an overwhelming sense of responsibility for failing to achieve imagined standards. One participant even described her fantasy of "going into hibernation until the end of the year".

A strong sense of *loneliness* envelops these students and surpasses physical separation, encapsulating a deep emotional isolation caused by the guilt. The most common sentence all participants said was "I feel like everybody can do it except me" or "I have a feeling that everyone around me understands, and only I don't". One participant quoted a song: "Taylor Swift said "I was so ahead of the curve, the curve became a sphere", meaning everything she knew up to that point changed, and it was more difficult for her to harmonize with others, who got over it more easily". Loneliness becomes both a symptom and a cause.

Students described *procrastination* as a tool to avoid facing perceived weaknesses, thus worsening the loop of guilt and leading to a pattern of disengagement from academic duties: "Mostly I repeat the same mistake again, because I put everything off until the last moment, it's uncomfortable for me to study what I despise... If I make the same mistake again, then I get a bad grade". They do not procrastinate just school duties, but also common everyday activities, such as making bed in the morning. They are using phones to "avoid thoughts" and engage in "mindless scrolling" instead of studying.

The subtheme of *fighting alone* embodies a prevalent sense of isolation. As participants state, they feel like people in their environment will blame them for being burned out and won't help them: "If I share that I'm burnt out in my home, they will blame me. If I share it with some other people, they will ignore those feelings and tell me I'm exaggerating." Students acknowledged that they still feel the need to appear strong: "I don't want them to see me as a victim". However, some rationalize having to fight alone, saying things such as: "I never asked my family for support. For everything in life that I wanted, I had support from myself and that was enough for me".

Participants described *conflicts with peers and friends*, which were molded by feelings of guilt that spilled over into interpersonal interactions, leading to isolation and strained ties as students dealt with their internal issues. However, conflicts can also emerge from friends' lack of understanding of the participants' studying obligations: "I can't explain to them that I need to study and practice and that my life depends on it". One participant admitted that these conflicts happen because he "perceives behavior of others as threatening and fears from losing interpersonal relationships".

Some students acknowledged *suppressing the feeling* of school burnout in order to handle emotions of guilt and maintaining a coping veneer while dealing with extreme

emotional suffering: "I have a constant need to get it out of me, and I constantly repress it" One participant said that he wants to communicate, but he struggles greatly with verbalizing his struggle: "Very often I have a problem of not being able to say it, rather I want someone to notice that I'm not okay".

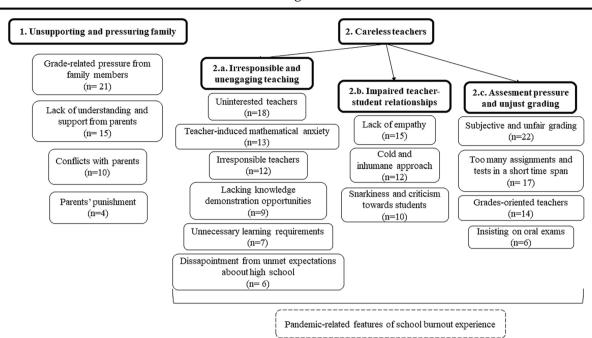
Impaired Physical Health

This theme, comprising three subthemes, provides a comprehensive insight into the physiological toll that the educational journey may exact on students.

The subtheme of *exhaustion*, present in each interview, acts as a poignant cornerstone within the area of poor physical health. The deterioration of immunity systems, recurrent headaches, bouts of illness, and the onset of anemia highlight the clear physiological repercussions of prolonged stress and overexertion. One participant said she feels like "her head is going to fall off ". They mention frequent muscle pain from excessive sitting during the day. These indications of physical suffering parallel students' significant emotional and psychological exhaustion, indicate the delicate connection between their mental and physical health.

A strong subtheme of troubled sleep arises, bringing to our attention severely interrupted sleep habits. Participants noted restless nights and disturbed sleep, resulting in a cycle in which their physical wellbeing exacerbates their mental breakdown: "Because of what will happen tomorrow or the day after tomorrow, I can't sleep. I am concerned about how I am going to do everything in time". One participant said that she gets up in the morning "like a soldier, fast and panicked". While some participants said that they sleep fewer hours per night than usual ("Sleep is reduced to a minimum where I barely function"), some say that they sleep more, or that they "crash" during the day due to being exhausted ("It happens that I can't sleep at night, so tomorrow I just sleep and that's all I do."). One participant noted: "Burnout is not related to the quantity of sleep, but the quality. It doesn't matter if I sleep six or 12 h, I will always wake up tired." One participant described her vivid dreams during a period of burnout: "I have always had the same dreams at the end of August, before the start of school and at the end of June, before the end of school. In them it's like I'm running away from something, like I'm in a video game. It's strange because I dream about similar scenarios for a week. For example, I go to school and forget to put my sneakers on, and it's so stupid, I don't even know how to explain it. And then I try to find my apartment in the building, and I can't find it. And then the panic starts in the dream, as if I'm going to be late for school or I'm running away from something or someone".

The subtheme of *eating disturbances* adds a degree of complication to the toll of burnout within the landscape of



External factors contributing to school burnout

Fig. 2 Main themes and subthemes referring to external risk factors

decreased physical health. Students described changes in their eating habits, ranging from loss of appetite to overeating and sugar cravings: "In those moments I refuse food, so I don't want to eat, and in the moments after I feel sick, so I overeat." Four female participants stated that they previously suffered from eating disorders and that burnout only reinforces these symptoms. One of them said: "I don't recognize myself in the mirror", while the other said that she suffered from both anorexia and bulimia while being burnt out.

External risk factors

Students narrated the external factors that lay the ground or intensify school burnout in both the context of the family and the context of the school (see Fig. 2).

Unsupportive and Pressuring Family

This theme, with its four subthemes, emphasizes the deep influence of family dynamics on students' wellbeing and academic progress, that is, the ways in which family relationships and expectations contribute to students' burnout experiences.

Many participants described feeling an enormous *graderelated pressure* from family members. The competitive nature of academic achievements, reinforced by family demands, intensified their experience of burnout and compromised their overall wellbeing: "I feel guilty for not being able to find a way to live up to the expectations of my parents and teachers. I feel like a failure in a way because something is expected of me, and I don't meet those standards". One participant said that his parents cannot understand his limitations in terms of academic achievement: "The attitude that surrounds me, is, "School is for mediocrity"...As long as you are healthy and a typical person, you can have the highest grades, you can learn everything that is taught in school." Participants remembered early childhood, when the fear of failure and the subsequent parental displeasure molded their opinions of school as an unwelcoming environment: "I remember literally dreading school when I was little".

Many participants described having a lack of understanding and support from parents: "They don't understand how school functions now, that you can't just listen in class and learn everything right away. Now there are always additional materials, presentations, papers...". Participants expressed a need for understanding and encouragement, while some still put the blame for burnout on themselves: "Maybe in the affect, when I get annoyed, when they get annoyed, so we argue in the affect and then I feel like... that I have little support. Maybe I have, maybe it's all subjective". Several interviewees described how their parents negated their symptoms of fatigue: "To them, I am more lazy than unmotivated... Their solution is to just sit down and study". Their stories revealed a difficulty to communicate their emotional discomfort, which was frequently greeted with denial or downplaying of their experiences: "If I open up to my parents about it,

I don't think my father would understand. Mother has some understanding, but she will somehow find a way to blame me for the fact that I put myself in that situation."

Conflicts with parents over academic performance and ambitions were a frequent subtheme. These contacts with parents were a source of anxiety, worsening feelings of fatigue and, ironically, worsening students' academic achievements: "I live with my divorced parents, I'm with them all day. A hundred times I didn't get to learn something, because I got angry and cried, because we had a fight".

The recall of *parent's punishment* in reaction to academic underachievement was a particularly disturbing subtheme: "I was grounded. I didn't go on winter holidays because I didn't do well in the semester". One participant recalled frequent fights with her mother: "Those were fights from the seventh grade until the beginning of third year of high school. There was conditioning, like, "If you don't get an A in math, you won't leave the house, you won't get this, you won't get that, you won't go anywhere".

Disengaged Teachers

Disengaged Teachers evolved as a higher-order theme within the conceptualization of school burnout, emphasizing the critical role that teacher-student relationships and instructional approaches have in students' general wellbeing and academic experiences. This multifaceted subject is divided into three subthemes, each having its own subthemes that highlight the various facets of teacher impact on students' burnout experiences.

Irresponsible, Unengaging, and Inadequate Teaching This theme, with its six subthemes, demonstrates the severe influence of inadequate teaching practices on students' emotional wellbeing and academic engagement.

As students pointed out, there is an abundance of *uninterested teachers*: "They teach what I can read in the textbook, nothing deeper than that...I wonder why it is so and I can't understand that someone just isn't interested." Uninterested teachers fail to spark students' interest in studying, resulting in lower motivation and an increased risk of burnout. As one student explained: "I study a subject much easier when someone presents it to me in a more human way, and not like a robot". Participants frequently indicated opinions of teacher amotivation: "We don't know anything about mathematics...she doesn't bother to explain that much to us. We all get Fs and she moves on. She won't teach remedial classes. I don't know if it's because the teacher doesn't like us, or she just enjoys torturing us".

Teacher-induced mathematical anxiety is also prevalent and highlights the long-term influence of instructors' attitudes and teaching approaches on students' emotional responses to the subject of math. Anxiety caused by teachers instilled demands impedes pupils' ability to engage successfully with the topic of mathematics: "Then, throughout a normal day, nothing should be bad, but then I remember "Oh, I have math class", and then I slowly start to panic".

Participants shared stories about *irresponsible teachers* missing lessons, interrupting the flow of learning and leaving students feeling disoriented. This inconsistency undermines students' trust in the educational process, intensifying their sense of detachment and dissatisfaction. Also, teachers were often late providing educational materials necessary for studying. Students emphasized the tension and worry that result from being unable to fully prepare for assignments or tests due to a lack of resources: "I'm under pressure that I have to come to school next week and answer everything as I was told, even though I got barely three and a half sentences of material.".

Students also sense *lacking knowledge demonstration opportunities*: "No one asked you to explain something from the material. And simply, I realize that all that effort and work will not even be rewarded, not because I don't know how to explain it to someone, but because no one gave me the opportunity to do it".

The implementation of *unnecessary learning requirements* characterized some students' experiences: "They expect us to know something from primary school, but they don't understand that in primary school we do the same thing we do now, that is—nothing. They ask too much of us who don't know much". They also feel as if their knowledge is being evaluated based on "dubious" standards: "That's nonsense, they insist on information that is just informational, like you are on a quiz of some kind. And when you don't know it, they think you don't understand."

Some students expressed frustration due to *disappointment from unmet expectations about high school*: "There I experienced a big disappointment. When I started going to school, everything looked different in my head, I imagined everything very differently, and reality hit me. In my first year, I had the worst grades since I started school."

Impaired Teacher–Student Relationships This theme highlights three separate subthemes that showcase complex interactions and relationships between educators and students in the context of school burnout.

Students often described *lack of empathy* as a persistent issue that arises when teachers fail to understand their pupils' specific needs and various backgrounds. One participant said that "his teacher did not show understanding in the light of his father's deathly illness". Participants frequently related stories about teachers ignoring their concerns or challenges, leaving them feeling isolated and frustrated: "No one is as flexible as they should be. And now, and before, especially now, it all annoys us. The teachers were always strict and behaved as if only their subject existed". The subtheme *cold and inhumane approach* refers to instructional strategies and tactics that do not correspond to students' learning styles, developmental stages, and priorities: "I think there are a lot of inadequate teachers who don't know how to work with children on the psychological side, like, in addition to teaching them something, to teach them also on mental health and to form their own opinions, which is very necessary for children". Students mostly expressed their need for a more humane approach from their teachers toward them. One student said: "They don't even have to devote themselves, but to behave more like people and as if it were a human relationship, not just a hierarchical relationship. I don't expect every teacher to talk to me about my life, I just don't expect them to be so cold...".

Teachers often behaved with *snarkiness and criticism* toward students—Students described occasions in which teachers' statements were filled with sarcasm or unjustified criticism, lowering their self-esteem and confidence even more: "She brought me to the board, I didn't know how to do the problem, and she was like "Your brother always solved all these problems". I just said OK. I mean, great, but what does that have to do with me? I felt uncomfortable". One of the students said that she feels as if this is the result of "teachers' personal frustrations": "Teachers who wanted a better career came here to "spit out" on us for failing to become university teachers...and then they decided that we must be as crazy about their subject as they are".

Assessment Pressure and Unjust Grading This theme focuses on the critical role of evaluation procedures in determining students' burnout experiences. This theme embraces five interwoven subthemes that, on one hand, reveal an environment obsessed with assessment and grading, and on the other hand, showcase how the grading standards are unrealistic, unadjusted, and unfair.

Participants often debated subjective and unfair grading, which drew attention to the negative impact of grading standards lacking objectivity and openness. They explain that in their teachers' view their identity is fixed to a grade that they got at the beginning, with no chance to move on up: "For example, in your first year you had a D in a subject, and you will have a D in that subject by the end of the senior year. No matter how hard you try. Because you are a D and you will be a D. Someone who is an A from the first or second year, he will always be an A. The teacher will arrange for him to have an A". Students feel like there is a lot of unjust favoritism on one hand, but also unjust hatred on the other hand in their classes: "Teachers do not evaluate knowledge, but rather an experience with the student, his way of speaking. Those who smile non-stop and flatter their teachers have better grades than the others." As a result, perceived grade-effort disproportion is present among students, they believe their efforts do not correlate to the grades they obtain, thus questioning the meaning of the entire educational process. Students related stories of how their hard effort did not provide the desired results, leading to disillusionment and aggravating feelings of burnout: "I simply want to get what I study for. If I don't study and get an F, that's OK, I'll try harder next time. I'm not complaining about a bad grade, but about a grade I didn't deserve".

Students are also being overburdened with *too many* assignments and tests in a short time span, hindering their capacity to engage in deep learning and encouraging sentiments of being overwhelmed and stretched thin: "In general, the distribution of all school duties is bad, because everyone suddenly starts throwing everything at you, and then it's too much for you. When they do that, it is impossible for me to do everything on time, if I want to have any success".

The students often complain of *grades-oriented teachers*, who emphasize the importance of end results above the learning process itself. As one student said: "I often feel like certain teachers often only see me as a grade and not as a person". Participants repeatedly mentioned the predominance of educators who place grades ahead of holistic learning, creating a competitive climate: "It's somehow more about grading, rather than teaching you something...I think that we learn so little, and we are graded so much". Students also described a discrepancy between the teachers' work efforts and their expectations of students: "They don't do anything in class, and then, when it comes to grading period, they panic and then pressure us to learn something, and of course they didn't even teach anything, but expect us to learn only from the book."

Teachers are also *insisting on oral examinations*. Due to their performative character students exhibited increased anxiety, which often led to feelings of vulnerability and inadequacy: "Even though I know something very well, it will happen to me that I stand in front of the teacher, and, under all that tension and pressure, I can't do it anymore... all the information is so scrambled". The subtheme explains how certain forms of assessment can contribute significantly to burnout.

Interconnectedness of Aspects and External Risk Factors

Although we have limited data and cannot account for causal relationships between the themes, we were able to recognize some patterns and offer a working hypothesis on school burnouts' emergence and process. From co-occurrence analysis we gained insights on how specific external (sub) factors could be connected to specific (sub)aspects of school burnout (see Fig. 3).

Firstly, it is noticeable how an unsupportive and pressuring family mainly accompanies feelings of perceived incompetence and fuels guilt-induced withdrawal. Then,

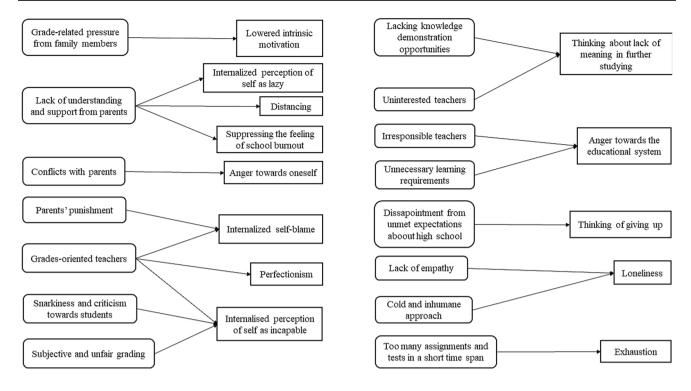


Fig. 3 Most frequently associated aspects of school burnout and external risk factors

irresponsible, and unengaging teaching is tied to loss of meaning and specifically triggers students' anger toward the educational system. Impaired teacher-student relationships contribute to loneliness and further reinforce students' internalized perceptions of themselves as incapable. Lastly, assessment pressure and unjust grading fosters perception of self as lazy, as well as perfectionism, leading to exhaustion. Although some students mentioned pandemic when narrating their emotional reactions and states, they were always related to the ways ERE was organized-to disengaged teachers, poor organization of teaching and assessment pressures, and not to health-related issues. From our data we can see how unsupportive family, complemented by gradesoriented teachers, all being immersed in a culture that places a high value on academic achievement, which additionally encourages parents and teachers to put academic pressure on their children (Aunola et al., 2000) can lead toward school burnout.

Discussion

In our endeavor to offer a new conceptualization of school burnout, more comprehensive and precise than the one that is typically used (e.g. Salmela-Aro, 2009b), we discovered a mosaic of experiences through the narratives of secondary school students from Serbia. In the following lines we will reflect on themes related to the aspects of school burnout and external factors that contribute to it, as well as their relationship, which will help formulate a new definition of school burnout syndrome. We will also relate the new conceptualization to well-established theoretical models and look into potentials for preventing and alleviating school burnout.

Reflecting on Main Themes

The theme Loss of Meaning emerges as a fundamental and central facet of school burnout, echoing the feelings of high school students who struggle with a sense of purposelessness in their educational journeys. While it involves a variety of individual motivational and cognitive difficulties, some of them being recognized in recent study on occupational burnout, such as lack of motivation and executive functioning issues (see Tavella et al., 2021), this theme is founded in irrefutable systemic causes. For example, loss of intrinsic motivation has frequently been registered in adolescents (Gnambs & Hanfstingl, 2016), but here it emerged as an important aspect of burnout, tightly related to external factors. Loss of Meaning is more than just academic disengagement; it reflects a significant gap between the educational system (not only its requirements, but fundamental values as well) and students' intrinsic drives and goals.

Intense emotional reactions and states refers to both internalizing problems of different intensity, such as anxiety, sadness, depression, apathy, as well as emotions such as irritability and anger (toward oneself and the system). This is in accordance with previous studies which showed that burnout shares overlapping symptomatology with affective disorders, especially depression (Verkuilen et al., 2021; Salmela-Aro, 2009) and with the latest in-depth qualitative study on occupational burnout which showed that burnout involves a spectrum of affective states (Tavella et al., 2021). The prominence of substance use as a coping technique is shown within the burnout experience, highlighting the extremes to which some students would go to relieve emotional anguish. This is in line with findings about the relationship between the avoidant coping strategies and higher levels of burnout in adults (e.g. Chan & Hui, 1995), as well as the relationship between avoidant coping strategies and lack of intrinsic motivation in students (Cabras et al., 2023).

The theme of perceived incompetence triggered by comparison with classmates highlights the inner but still relational problem of a high school students caused by a culture that promotes high achievements and competitiveness over collaboration, which has already been recognized in the literature (Federičová et al., 2018; Kazanjian, 2022; Lee et al., 2021; Scherrer et al., 2022). Students attribute their inadequacy to fixed, stable characteristics which are therefore not under their control (abilities), otherwise known as a "fixed mindset" (Dweck & Yeager, 2019), which proved to decrease expectancy for future success (Weiner, 1985). This places them into a perpetual subordinate position when compared to their peers whom they uncritically view as inherently more capable and successful. Unlike common reasons for comparison and potential grounds for discrimination and feeling of diminished self-worth among adolescents, such as physical appearance, ethnic background, or financial status (e.g. Bucchianeri et al., 2013), the school burnout syndrome exclusively revolves around comparison related to abilities and academic achievements.

Guilt-induced withdrawal dives into the complex guilt that high school students face during burnout that manifests again in both the internalizing (distancing and loneliness) and externalizing form (conflicts). Particularly subthemes *distancing, loneliness, fighting alone*, or *procrastination* represents the disengagement that students use as a reaction to the shame they feel about their academic challenges and the perception of others as not being able to understand and help. From previous studies that showed correlations between internalizing behavior and higher risk of disengagement and dropping out (Gubbels et al., 2019; Olivier et al., 2020), one might assume that this facet of burnout can be a warning sign to teachers.

The theme of *impaired physical health* highlights the serious physical symptoms—excessive exhaustion, sleeping, and eating problems, that students face. This is in line with previous studies suggesting that academic pressure can lead to sleep deprivation (Lehto et al., 2019), unpredictable food habits (Kristanto et al., 2016), and a general disregard

for physical health. While some studies suggest that severe physical issues are the outcomes of burnout (Bakker et al., 2023), we argue that at least problems associated with sleep and eating are constituents of school burnout syndrome.

Themes that were identified in accounts on external risk factors are in line with the literature on school burnout, where school and family expectations surpass the capacities and resources of the students (Meylan et al., 2020; Murberg & Bru, 2003; Salmela-Aro et al., 2008a, 2008b; Slivar, 2001; Yusoff, 2010); however, we obtained a much more detailed picture. Unsupportive and pressuring family, which requires academic success, but does not provide emotional support and even punishes for underachievement tackles a critical part of a student's support network that can have a substantial impact on their experience with school burnout. It has been shown that parents of low burn-out students showed more emotional warmth and understanding, but in contrast, parents of high burn-out students showed more punishment and harshness, refusal and denial, excessive interference, and protection (Li & Gan, 2011).

The second core theme referring to external factors, disengaged teachers, draws emphasis on the quality of teaching, student-teacher relationship, and assessment. From the famous Hattie's meta-study, we know that teachers are the strongest school-level predictor of student achievements and that expert teachers nurture positive classroom climate, provide, and ask for the feedback and carefully monitor students' progress (Hattie, 2009). Teachers' lack of motivation and devotion, teacher-centered approach, and poor teaching strategies lead toward negative academic outcomes (Ganyaupfu, 2013). Besides instructional support, teacher emotional support and positive relationships are also known as predictors of students' lower dropping out and higher wellbeing (Bernstein-Yamashiro & Noam, 2013; Simić & Krstić, 2017). Lack of such emotional support and criticism, on the other hand, set ground for burnout. Finally, like parents who often set too high expectations in terms of grades, teachers can also induce burnout by their high expectations, unfair, and subjective grading, which is in line with previous studies showing that overemphasis on high-stakes examinations and grades can foster a scrutinizing atmosphere that puts the students under unnecessary stress (Romanowski, 2004).

Reflecting on the Interconnectedness of Main Themes

Like occupational burnout, and as Salmela-Aro and Upadyaya (2014a) pointed out, we believe that interconnectedness between the aspects of school burnout and their relationship with specific family and school characteristics can be interpreted in the frame of the Job Demands-Resources theory/model (Bakker & Demerouti, 2017). As workload, work pressure and conflicts, accompanied by lack of support at work predict occupational burnout (Bakker et al., 2023), we consider family pressure, poor teaching competencies and teachers' lack of interest and flexibility, as well as a competing and grade-oriented atmosphere in schools, accompanied with distant and unsupportive parents and teachers being predictors of school burnout. Relying on the Bronfenbrenner's model we can go one step further and claim that influences from the wider society-macrosystem, such as the too extensive and irrelevant curriculum, valuing competition and achievement over wellbeing and cooperation in wider society, low status of the teaching profession and insufficiently developed teacher competencies additionally contribute to students' school burnout. High pressure is especially present in high-school students (academic track), which is in accordance with previous studies (Salmela-Aro et al., 2008a, 2008b). In line with Shelton's (2018) claims that time can affect individuals, relationships, the macrosystem, and all the other aspects of the person and the context, the role of time, both individual and shared time experience, is also invaluable. Ecological transition which occurs throughout an individual's life (Bronfenbrenner, 1979), such as transition from primary to secondary school triggered school burnout in some students. The COVID-19 pandemic also underlined the role of external risk factors, mostly those related to teachers and the educational system in general.

New Conceptualization of School Burnout

Compared to current definitions of school burnout that emphasize the tripartite nature of this phenomenon comprising exhaustion due to the demands of school, a cynical and distant attitude toward school and feelings of inadequacy as a student (Kiuru et al., 2008; Salmela-Aro & Näätänen, 2005; Schaufeli et al., 2002), we show that although exhaustion, cynicism, and feelings of inadequacy are important, they present an inadequate picture of the multifaceted nature of school burnout syndrome. The facet loss of meaning resembles cynicism (Salmela-Aro et al., 2009b) the most, but goes beyond it, as shown by two other major themes emerging from our study: Guilt-induced withdrawal and intense emotional reactions and states. Looking back on our examination, it is clear that we cannot adequately characterize the complexity of these sensations and ideas with cynicism alone, but that a far more extensive conceptualization that involves motivational, cognitive, and affective processes is needed. Perceived incompetence triggered by comparison with classmates and Guilt-induced withdrawal are similar to low self-efficacy, that is belief of inadequacy in school-related accomplishment (Salmela-Aro et al., 2009b), but concentrating exclusively on poor self-efficacy to assess feelings of inadequacy ignores the many internal conflicts that students face. Impaired physical health and intense emotional reactions and states resemble exhaustion, but we saw how much more complex these symptoms are than the mere exhaustion, as they include a variety of somatic symptoms as well as irregularities in eating and sleeping habits. We conclude that the key characteristics of school burnout experience are: loss of meaning and purpose in students' educational journey marked by a fading passion for learning, intense emotional reactions and states, perceived incompetence triggered by comparison with classmates and others, guilt-induced emotional and physical withdrawal from the environment and severely impaired physical health.

As we already suggested, the existing definition of school burnout (Salmela-Aro et al., 2009b) neglects the influence of family dynamics, school environment, and systemic educational issues on students' experiences of burnout. We determined that the school burnout syndrome is highly dependent on the context, that is, that school burnout cannot be narrowed down to include only students' relationship with their schoolwork, but must include broader systemic influences, such as those from two primary agents of socialization: family and school.

Therefore, we can finally define school burnout syndrome as a state of unique and comprehensive physical, cognitive, and emotional collapse—a breakdown which occurs when a student confronts an overwhelming loss of purpose and passion in their educational journey and, at the same time, lacks necessary support from the family and school, due to insufficient teachers' competencies and engagement and overall grades-related pressure in schools and society.

Reflexivity and Limitations

There are a couple limitations in this research paper. Firstly, 20 out of 25 participants were females. Even though no qualitative difference in school burnout experiences between girls and boys was observable, there should still be more males in future research on school burnout. Secondly, our participants were mostly students that are on academic track (because they were higher on SBI than vocational school students), so the generalizability of our conclusions to vocational school students might be questionable. Thirdly, all our participants come from a culturally dominant group from one country-Serbia, so we cannot be certain that the school burnout experience in the cultures and educational systems significantly different from the Serbia would be the same. Future studies should therefore include larger and culturally more diverse samples. Additionally, involving a control group-students low on burnout who would narrate their experiences with parents, teachers, and the entire educational system would help us unambiguously claim that certain emotional states or beliefs are inherent solely to the burnout syndrome.

Although we were able to identify processes and possible causal relations, it is not yet possible to draw reliable quantitative-like conclusions, such as correlations and causal relationships. From the conceptual point of view, it can be also argued if all aspects of school burnout that we identified are constituents or some are consequences or simply—correlates of burnout. Longitudinal and mixed-method studies would be needed for studying the process of school burnout in more detail.

While acknowledging these limitations, we believe that this study provides thick data that is reliable and more credible than many others due to its design and realization. The study benefited from collaborative efforts of two researchers, one being deeply involved with Serbian educational system and schools through her abundant experience in both practice and educational research, and the other being of similar age to participants, who might therefore feel more comfortable to share intimate information.

Conclusions and Implications

This research pointed to a multifaceted and relational nature of the school burnout syndrome that develops over time in an unsupportive, but demanding environment. Females and secondary school students from academic track are at higher risk of school burnout, but the qualitative nature of this experience is the same in different groups of students. It encompasses loss of meaning and motivation, accompanied with many cognitive dysfunctions, lowered self-efficacy, withdrawal from learning and social activities and a variety of physical and emotional issues, all being triggered or fueled by lack of understanding and support from demanding parents and teachers.

Acknowledging the essential impact of the contextual factors and time on school burnout, we can delineate certain recommendations for parents, schools, and educational policy makers. At the family level it is important to educate (future) parents (and other caregivers) about parenting styles and practices that support cognitive and socioemotional development of children. At the school level it is necessary to promote values of cooperation (and not competition and comparison), togetherness and empathy, as already suggested by many authors who claimed that supportive environments acknowledge and address students' emotional challenges (Lombas et al., 2019; Wang et al., 2020), even more frequent after COVID pandemic (Elharake et al., 2023). The school staff should place more emphasis on building a positive school climate and reduce the anxiety students feel about testing through highlighting less stressful forms of assessment, e.g. formative assessment, peer assessment, and involving students in the identification of their own assessment needs. We also advocate for teaching methods that contribute to a positive classroom climate, sense of community and belonging, and wellbeing such as collaborative learning, project-based learning, field work, outdoor, and extracurricular activities. For this to happen pre-service and in-service teacher (and school principal) education should be improved, so they include more content related to socioemotional development of children, positive school and classroom climate, constructive communication and empathy, as well as formative assessment and feedback. School and local community psychologists should be more engaged around raising awareness about the dysfunctional communication patterns and messages that parents and teachers convey about children's and adolescents' abilities or personal traits that can lead to or intensify school burnout.

However, changes on individuals' and microsystem's levels are not viable without systemic changes. Change in curriculum so it relates more to the needs of future jobs, encouraging intrinsic instead of solely extrinsic motivation is needed. At the macrolevel it is also needed to promote holistic development and learning instead of mere academic achievements. Additionally, teacher status and therefore motivation should be improved by providing better rewarding systems and promoting examples of good practice. Finally, we argue that the emergence of school burnout syndrome is not an individual's collapse stemming from inner limitations, but it ought to be regarded as an indicative symptom of systemic deficiencies within the educational system.

Appendix

Interview protocol

- 1. Knowledge and experience with school burnout:
- 2. Have you heard about school burnout?
- 3. What does school burnout mean to you?
- 4. Have you ever experienced school burnout and what was it like?
- 5. Periodization:
- 6. In which period would you say you burned out the most?
- 7. How was your school burnout different when we went to school online compared to now when we go in person?
- 8. Family:
- 9. Do relationships within your family play a role in your school burnout?
- 10. Do you feel like you are getting adequate support from your family members?
- 11. Friends:
- 12. Do your relationships with friends play a role in burnout?
- 13. Do you feel like you get adequate support from your friends?

14. School environment:

- 15. Is there anything going on at school that is playing a role in your school burnout?
- 16. How is your relationship with the teachers?
- 17. Do teachers play a role in your burnout?
- 18. What would you say, what are the teaching methods of your teachers?
- 19. What do teachers expect from you and how do they evaluate you?

20. Cognitive aspect:

- 21. What was school burnout like from your point of view?
- 22. What are your thoughts when you burn out?
- 23. Do you then have any different beliefs about yourself or others?

24. Emotional aspect:

- 25. How do you feel when you burn out?
- 26. What emotions do you mostly experience and express then?

27. Behavioral aspect:

- 28. What changes do you notice in your behavior during those periods when you burn out?
- 29. How is your confidence when you feel like you're burning out?
- 30. How does it show in your everyday life that you are burnt out?

31. Physiological aspect:

- 32. How is your physical health when you burn out?
- 33. What physical symptoms do you notice then?
- 34. How is your sleep and eating pattern, for example, when you are burnt out?
- 35. Coping:
- 36. How do you deal with school burnout?
- 37. What or who can help you the most in that situation?

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Declarations

Conflict of interest Authors confirm that there is no financial or other substantive conflict of interest that might be construed to influence the results or their interpretation in the manuscript.

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