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ORYGINALNE  
ARTYKUŁY  
BADAWCZE

Katarzyna Tomaszek

Pedagogical University of Cracow, Poland

e-mail: katarzyna.tomaszek@up.krakow.pl

ORCID: <https://orcid.org/0000-0001-7019-5403>

Agnieszka Muchacka-Cymerman

Pedagogical University of Cracow, Poland

e-mail: agnieszka.muchacka-cymerman@up.krakow.pl

ORCID: <https://orcid.org/0000-0002-1627-4036>

## How Do High and Low Burnout Students Cope with Stressful Situations? Examining Associations Between Coping Mechanism and School Burnout Syndrome

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### Abstract

Previous studies confirmed that maladaptive coping strategies are strongly connected to job burnout. However, little is known about the association between coping strategies and student burnout and the differences between high and low burnout adolescents in the frequency of using them. The purpose of this study was to examine the relationship between strategies of coping with stress and school burnout among Polish high school students. 230 adolescents from Poland (25.7% boys) aged 17–20 ( $M = 18.25$ ,  $SD = 0.45$ ) participated in the study. The Polish version of SSBS scale for assessment of the level of school burnout and the Brief Cope Inventory were used. School burnout was significantly associated with lower level of problem-focused coping strategies and higher level of emotion-focused maladaptive coping strategies. Statistical analysis confirmed the significant differences in the frequency of using maladaptive coping strategies between high and low burnout students. Regression analysis revealed that lower

positive reframing and higher self-blame were the strongest predictors of school burnout level. In the final regression model, 17% of variances in SSBS total score was explained by such coping strategies as: positive reframing, turning to religion, searching for emotional support and denial and venting. We confirmed the significant role of maladaptive coping strategies in increasing burnout among young people. The findings also indicated that in preventing high school students' burnout, more attention should be paid to enhancement of problem-focused coping strategies such as positive reframing, turning to religion and emotional support.

**Keywords:** school burnout, coping strategies, education, adolescents.

## Introduction

### *Symptoms of students' stress*

The term stress is commonly used in a negative way as a cause of physical and mental functioning below one's own abilities (Lewandowski et al., 2014). Bernstein et al. (2008, p. 982) defined stress as "a negative emotional, cognitive, behavioral and physiological process that occurs as a person tries to adjust to or deal with stressors". The psychological most popular meaning of stress was created by Lazarus and Folkman (1984, p. 19), who defined it as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being social, academic and professional settings". However, in the literature two types of stress are distinguished e.g. *eustress* (positive stress, when dealing with daily demands, enhances people pushing them towards achieving their goals) and *distress* (negative stress, when the pressure exceeds the ability to cope which pulls down the performance of individuals and leads to problems) (Chao, 2012; Tavoracci et al., 2013; Negi et al., 2019). Miller, Smith, and Rothstein (1994) proposed another classification based on stress duration such as acute stress (caused by short time situational factors), episodic acute stress (experienced regularly caused by goals and demands) and chronic stress (experienced for a long-lasting period, when the personal resources are diminished, which leads to a physical and mental health problems).

Psychological distress connected with the school environment seems to be an inevitable part of young people's lives (Negi et al., 2019; Pascoe et al., 2020). High and unhealthy stress related to difficulties managing the demands

of school, home and work is reported by many young people (Anderson et al., 2014).

Extreme amount of stress leads to serious mental and social problems such as anxiety, depression and psychological problems (Gustems-Carnicer et al., 2019; Negi et al., 2019; Pascoe et al., 2020). Additionally, according to research by Groeneveld et al. (2013) cortisol levels in children going from kindergarten to school are higher. If the concentration of this hormone in the body is high, it can have an effect on mood disorders, depression and a decrease in immunity in children. In his research, Torsheim et al. (2001) specified that students experiencing school-related stress more often complained of a headache, abdominal pain, back pain, dizziness and concomitant somatic complaints. Previous research indicated that education-related stress may increase anxious and depressive states, poor well-being, cigarettes, drug and alcohol use, poor sleep, physical health problems, low academic performance, student burnout and dropout syndromes (Pascoe et al., 2020).

#### *Causes of stress at school environment*

Murberg et al. (2004) specified four areas underlying school stress: difficulties with school peers, worrying about academic achievement, pressure at school, and conflict with parents and / or teachers. More specifically, the school stress generating factors commonly mentioned by authors are concerns about school examinations, high parental and teachers expectations, class ranking competition and peer pressure, lack of leisure time, financial problems, dealing with friends/peers (Shahmohammadi, 2011; Subramani & Kadhiraivan, 2017; Pascoe et al., 2020). Williams et al. (1999) identified two types of stressful situations that teenagers encounter in the study: struggling with everyday problems and important life events. Older teenagers used strategies to deal with greater diversity and used methods that directly reduce the impact of a stressor and involved a cognitive component (e.g., planned problem solving; reassessment) more often than younger teenagers.

Over half of adolescents aged 15–16 years felt ongoing pressure on high marks and fear about receiving poor grades (OECD, 2017). Educational distress among young people is usually caused by ongoing normative stressors, viewed as normal day to day hassles and navigates emotionally challenging circumstances, related to ongoing study demands (Lathren et al., 2019; Pas-

coe et al., 2020). In a study conducted by de Anda et al. (2000), one-third of the adolescents surveyed reported high levels of daily stress. The highest frequency stressors reflected concerns about future goals followed by several school-related subjects. Schraml et al. (2011) obtained similar results in their research. Over 30% of high school students have reported severe stress symptoms. Almost every second girl and every fifth boy reported that they felt stress to a large extent. It was found that 8.2% have severe stress symptoms that could be considered a sign of chronic stress in adults. In addition to the perception of high demands, low levels of global self-esteem, sleep disorders and poor social support have played a key role in predicting stress symptoms.

### *Stress coping mechanism*

The expression “to cope” may have two different meanings: (1) the way of dealing with stress, which means any technique that stressed people developed to help them to lessen the physical and emotional effects of daily pressure and (2) the transactional perspective on coping mechanism is related to conditions that undermine or exceed personal adaptive resources (Shahmohammadi, 2011). Lazarus (1993) defined coping as a key in managing stress, a process in which cognitive or behavioral efforts are made to manage specific internal and/or external sources of mental stress. The awareness of the chosen coping strategy decides about its adjustment to the reality they are experiencing. If they monitor the effects of coping they may master, tolerate, or reduce particular stressful situations (Shoda & Titiloye, 2019). That is why the passive or active approach to stress is not particularly good or bad itself, it depends on complex contexts. As Folkman and Lazarus (1980) stated the individuals’ efforts produce coping outcomes, which affect both the stressful event and individuals’ reappraisal of the coping processes. As Beck (1979) pointed out, people suffer from stress for many different reasons, but stress is not so harmful. In his opinion, inappropriate coping strategies are harmful, which have a negative impact on the mental health of adolescents and affect them later in adulthood. It is worth adding that ineffective (means maladjusted) coping may be only those reactions, which put the person at risk for developing physical, social or mental problems (de Boo & Witchers, 2009).

Psychologists divided coping into three main categories of: (1) active behavioral coping (2) active cognitive coping and (3) avoidance coping (Baqutayan, 2015). However, the most popular classification is based on categorizations: problem versus emotion focused coping and avoidance coping strategies (Shirazi et al., 2011). Problem focused coping refers to efforts that are employed to manage sources of stress; while emotion focused coping to managing emotions that the stressful situations activate (Baqutayan, 2015). Finally, avoidance coping places the focus away from both the sources of stress and reaction to it (Shirazi et al., 2011). In the coping literature the fourth strategy usually mentioned is social support, which refers to maintaining closer relationships and to mobilising more social sources under stressful situations (Westman & Shirom, 1990).

A number of studies have confirmed that emotion focused coping and avoidance coping, because of appraisal of stress as a threat, are positively related to maladaptive behaviors (drug abuse, ICT addiction etc.) and negatively with academic and school performance and mental health of young people (Roesch et al., 2002; Shirazi et al., 2011; Shoda & Titiloye, 2019). These negative coping strategies decreases the coping flexibility that allows to re-evaluate the stressful situation in order to modify or confront the problem (Heffer et al., 2017). An unhealthy coping is related to a feeling of withdrawal and social isolation, apathy, depression and anxiety, or a lack of motivation to engage in academic activities (Shoda & Titiloye, 2019). Additionally, Wills (1986) found that stress is positively associated with substance use, and four coping mechanisms (behavioral, cognitive, adult social support and relaxation) were inversely associated with substance use. Indexing measures for peer support, coping with distraction and aggressive coping were positively linked to substance use, independent of other predictors.

#### *Symptoms and consequences of school burnout*

School burnout syndrome is a set of psychological symptoms resulting from the continuous exposure of the student to school-related stress factors (Alemida et al., 2016). Freudenberg (1974), described it as an exhaustion due to the dysfunction of coping mechanisms, that occurs when a person is unable to struggle with increasing work demands. This term is also defined as a process of depletion of own resources and lack of energy (Maslach et al.,

1996). It also may be considered as a mechanism of psychological protection in situations where a person completely (or partially) suppresses their emotions in response to certain traumatic experiences (Boyko, 2004). Current issues include in the definition of this syndrome strong links between burnout and mental illness, especially depression (Maslach & Leiter, 2016; Koutsimani et al., 2019). According to Maslach and Leiter (2016) burnout is not a simple exhaustion, it includes detached concern, dehumanization in self-defense, and negative attribution processes, coping with emotional emptiness. The definition of burnout is mainly based on three elements that make up the syndrome: exhaustion resulting from school requirements, an uninvolved and cynical attitude towards school, and a sense of inefficiency and lack of educational competence (Salmela-Aro et al., 2009). More recently, Aypay (2012) revealed a 7-factor structure of adolescent burnout: Loss of interest in school, burnout due to studying, burnout due to family, burnout due to doing homework, lethargy and boredom due to teacher attitudes, need for relaxation and entertainment, and deficiencies in the school. There are many theories about burnout and a number of suggestions for dividing burnout into dimensions, but one common feature of all concepts is that students affected by burnout are not able to meet the school's demands. Most often, students experience the pressure exerted on them by their immediate surroundings. As a result, their school outcomes decrease, they are apathetic, uninvolved, bored during lessons, they often present avoidance or aggressive behaviors in classrooms (Tomaszek & Muchacka-Cymerman, 2018).

However, student burnout is not only related to the difficulties in learning activities (Shaikh et al., 2004). As Freudenberg (1974) stated, burned-out people behave and exist in the environment like depressed people. The symptomatology of emotional burnout is connected with wearing out, loss of energy, depletion, and fatigue. The manifestation of burnout syndrome in behavioral dimension refers to changes in school environment attitudes towards inappropriate and cynic behaviors, irritability, loss of idealism, withdrawal, and low self-esteem. The last dimension of burnout named inefficacy refers to reduced students' engagement, productivity and capability, low morale, and an inability to cope with school stressors or using ineffective strategies for remedying a stressful situation (Schaufeli et al., 2002; Yang et al., 2005; Gan et al., 2007; Salmela-Aro et al., 2009; Maslach & Leiter, 2016). The results of the

research carried out by Shin et al. (2014) showed that coping with problems negatively correlates with 3 dimensions of burnout symptoms, while coping with emotions positively correlates with 3 dimensions. The same research shows that seeking social support and reassessing the situation minimizes burnout symptoms. According to Suldo et al. (2008) coping styles (in particular anger and positive assessment) alleviate the impact of stress on global life satisfaction and internalize the symptoms of psychopathology. Many authors add also physical (such as headaches, sleep disturbances, chronic fatigue, gastrointestinal disorders, muscle tension, hypertension, lower immunology defense that caused higher risk of cold/flu episodes (Ahola et al., 2014), and cognitive symptoms (i.e. reduced cognition, diminished attentional capacity and problem solving success (May et al., 2015; Maslach & Leiter, 2016).

## **Methodology**

### *Study hypothesis*

School burnout is a psychological syndrome due to school-related chronic stress that results in emotional, cognitive, and behavioral symptoms. A concept was applied to the student's environments and this resulted in an increase in research analysing the sources of this phenomenon in the group of young people. Although past studies have confirmed the relationship between poor coping strategies and occupational burnout, little is known about such association among students. Additionally, to our knowledge there were no such studies conducted among Polish students. Thus, this study aimed to examine the relationship between coping strategies and school burnout among adolescents.

**H.1.** Problem-focused coping strategies will be positively, while emotion-focused coping strategies will be negatively associated with school burnout.

The results of the research carried out by Shin et al. (2014) showed that coping with problems negatively, while coping with emotions positively, correlates with all dimensions of burnout symptoms. The same research shows that seeking social support and reassessing the situation minimises burnout symptoms. According to Suldo et al. (2008), coping styles (in particular anger and positive assessment) alleviate the impact of stress on global life satisfac-

tion and internalise the symptoms of psychopathology, e.g. physical chronic fatigue, (Ahola et al., 2014) and cognitive symptoms (i.e. reduced cognition) (Maslach & Leiter, 2016).

**H.2.** Problem-focused coping strategies will be less frequently, and emotion-focused strategies will be more frequently used by school burnout students.

Burnout is recognised as a form of physical and mental exhaustion disorder caused by the depletion of personal and environmental resources (Bakker & Demerouti, 2018). Considering this definition, the mechanism that may underlie the burnout state should be understood as an effect of long-term and ineffective efforts of the individual to control the stressor, which ultimately leads to a state of general fatigue. Direct symptom of the state of losing the ability to cope with stress is the increasing loss of control over negative effects (depression) and tension (Salmela-Aro et al., 2009). However, struggling with difficult emotions is present throughout the burnout process, even after cynical attitude and false beliefs about personal competence appeared (Maslach & Leiter, 2016).

**H.3.** Maladaptive coping strategies, such as denial, venting emotions, substance abuse and self-blame, will have stronger prediction power in explaining burnout among adolescents than problem-focused coping strategies.

Previous research has not stated too much about which of the self-reliant coping strategies (i.e. problem-focused vs. emotion-focused) are more effective in reducing levels of school burnout among youth. However, some of the aforementioned job burnout research has suggested that emotion-focused and dysfunctional avoidance coping strategies are more strongly related to burnout syndrome (Spataro et al., 2016; Dix, 2017).

## **Materials and methods**

### *Participants and procedure*

The participants were recruited in one type of school: senior high schools from different regions in Poland. The participants volunteered for the study; they were approached in their classrooms and asked to fill in the tools and informed about the anonymity of the research. They received no reward for their participation in the study.



### *Data analysis*

From the data collected, we conducted a comparison of means (Student's *t* test) between the two samples with high and low levels of burnout to test the statistical differences in burnout indicators and coping strategies. Additionally, Pearson's and regression analysis were performed. The statistical analyses were calculated using SPSS 22.0.

### *Instruments*

Secondary School Burnout Scale (SSBS) by Aypay was used (2012). The SSBS scale consists of 34 items categorised into seven sub-scales listed as: LIS – Loss of Interest in School, BDS – Burnout Due to Studying, BDF – Burnout Due to Parents, BDH – Burnout Due to Doing Homework, BTT – Being Bored and Tired of Teacher Attitudes, NRF – Need to Rest and Have Fun, ISS – Incompetence in School. The lower the SSBS score, the higher the burnout level. The reliability in this study for SSBS was  $\alpha = 0.85$ , and for the subscales ranged between 0.32 to 0.83.

Brief Cope Scale (COPE) by Carver (1997) was used to assess 14 coping responses; it contains 28 items. In the Polish version, coping strategies are categorised into 7 factors: Active coping, Acceptance, Avoidance Behaviours, Sense of Humour, Turning to Religion, Searching for Support, Helplessness. In our study, Cronbach's  $\alpha$  ranged from 0.25 to 0.81.

### *Ethical approval*

The study procedure and instruments were approved by the Commission of the Ethics Committee of the Pedagogical University in Cracow (WP.113-6/2019).

## **Results**

### *Participants' characteristics*

The study was conducted on 230 adolescent students. Respondents' age ranged from 17 to 20 years old ( $M = 18.25$ ,  $SD = 0.45$ ). The sample included 171 (74.3%) girls and 59 (25.7%) boys. The mean school burnout level of all students was  $M = 83.43$ , and the standard deviation  $SD = 13.64$ . The descriptive statistics for the SSBS total score, i.e. skewness (0.219) and kurtosis

(0.905) indicated a normal distribution. Extreme groups were distinguished on the basis of standard deviation (results deviating by 1 SD from the mean). The high level of school burnout was diagnosed in 37 participants (16.1%,  $M = 106.61$ ;  $SD = 7.98$ ). 160 respondents exhibited a moderate level of school burnout (69.6%,  $M = 83.34$ ;  $SD = 6.07$ ). 33 participants were recognised as students without symptoms of school burnout (14.3%,  $M = 63.16$ ;  $SD = 7.00$ ). By applying the t-student test, it was found that all school burnout indicators were significantly higher in the group of burnout students. The Cohen's d effect sizes were strong in all cases.

#### *The relationship between coping strategies and student school burnout*

The higher the school burnout total score, the lower the frequency of problem-focused coping strategies (Pearson's r ranged from 0.15<sub>planning</sub> to 0.26<sub>positive reframing</sub>). Additionally, the results indicated that there is an increase in the severity of school burnout syndrome when more frequently using emotion-focused coping strategies (Pearson's r ranged from -0.13<sub>behavioural disengagement</sub> to -0.26<sub>self-blame</sub>).

#### *Differences in frequency of using coping strategies between high and low burnout students*

T-test revealed that the burnout students significantly more frequently used emotion-focused coping strategies such as: denial ( $t_{68} = 2.31$ ,  $p = 0.024$ ), venting ( $t_{68} = 3.20$ ,  $p = 0.002$ ), substance abuse ( $t_{68} = 3.27$ ,  $p = 0.002$ ), behavioural disengagement ( $t_{68} = 2.21$ ,  $p = 0.024$ ) and self-blame ( $t_{68} = 3.71$ ,  $p < 0.0001$ ). The Cohen's d effect sizes were moderate for denial and behavioural disengagement and strong for the rest of the emotion-focused coping strategies. Positive reframing ( $t_{68} = -2.81$ ,  $p = 0.007$ ) and emotional support ( $t_{68} = -3.37$ ,  $p = 0.001$ ) strategies were significantly more frequently used by students without burnout symptoms. The Cohen's d effect sizes were strong in both cases (Table 1).

Table 1. Coping strategies in high and low level of syndrome burnout groups

Variables	High level of burnout (N = 37)		Low level of burnout (N=33)		t	p	Cohen'sd
	M	SD	M	SD			
Active coping	4.00	1.27	4.48	1.64	-1.39	.169	-
Planning	3.65	1.38	4.24	1.32	-1.83	.071	-
Positive reframing	2.57	1.88	3.76	1.64	-2.81	.007	.68
Acceptance	3.51	1.45	3.70	1.61	-.50	.617	-
Humor	2.62	1.99	2.91	1.70	-.65	.521	-
Religion	1.35	1.89	2.06	1.60	-1.68	.097	-
Emotional support	2.89	1.07	3.91	1.44	-3.37	.001	.81
Instrumental support	3.14	1.34	3.82	1.83	-1.80	.077	-
Self-distraction	3.86	1.99	3.30	1.33	1.37	.175	-
Denial	1.62	1.32	0.88	1.36	2.31	.024	.55
Venting	3.78	1.27	2.76	1.41	3.20	.002	.76
Substance abuse	1.84	1.85	0.58	1.37	3.27	.002	.78
Behavioral disengagement	2.70	1.97	1.70	1.63	2.21	.024	.56
Self-blame	4.62	1.42	3.00	2.12	3.71	.000	.92

Source: Authors' research.

### *Coping strategies and school burnout – the results of regression analysis*

Four regression models were insignificant for such independent variables as active coping, acceptance, humour and instrumental support. Additionally, the bootstrap method revealed that regression models for planning, self-distraction and behavioral disengagement were also insignificant. The rest of the tested coping strategies appeared to be significant predictors of school burnout. Several problem-focused coping strategies were significantly positively associated with school burnout total score, i.e. Positive reframing ( $\beta = 0.26$ ;  $p < 0.0001$ ;  $F_{(1,228)} = 16.19$ ,  $p < 0.0001$ ,  $\Delta R^2 = 0.07$ ); Religion ( $\beta = 0.18$ ;  $p = 0.008$ ;  $F_{(1,228)} = 7.26$ ,  $p = 0.008$ ,  $\Delta R^2 = 0.03$ ) and Emotional support ( $\beta = 0.16$ ;  $p = 0.03$ ;  $F_{(1,228)} = 6.08$ ,  $p = 0.014$ ,  $\Delta R^2 = 0.03$ ). Emotion-focused coping strategies were significantly negatively connected to school burnout total score i.e. Denial ( $\beta = -0.18$ ;  $p = 0.007$ ;  $F_{(1,228)} = 7.33$ ,  $p = 0.007$ ,  $\Delta R^2 = 0.03$ ); Venting ( $\beta = -0.24$ ;  $p < 0.0001$ ;  $F_{(1,228)} = 13.54$ ,  $p < 0.0001$ ,

$\Delta R^2 = 0.06$ ); Substance abuse ( $\beta = -0.19$ ;  $p = 0.003$ ;  $F_{(1,228)} = 8.79$ ,  $p = 0.003$ ,  $\Delta R^2 = 0.04$ ) and Self-blame ( $\beta = 0.26$ ;  $p < 0.0001$ ;  $F_{(1,228)} = 16.48$ ,  $p < 0.0001$ ,  $\Delta R^2 = 0.07$ ) (Table 2).

Table 2. Regression analysis tested the effect of coping strategies on School Burnout Level (N = 230)

Variable	$\beta$	b [CI95%]	$\Delta R^2$	t	p
Active coping	.07	.65[-.50;2.03]	.01	1.13	.261
Planning	.15	1.55[-.03;3.20]	.02	2.24	.026
Positive reframing	.26	2.44[.80;3.99]	.07	4.02	.000
Acceptance	.07	.73[-.91;2.47]	.01	1.03	.303
Humor	.04	.29[-.60;1.21]	.001	.57	.569
Religion	.18	1.40[.31;2.47]	.03	2.70	.008
Emotional support	.16	1.46[.30;2.63]	.03	2.47	.014
Instrumental support	.10	0.92[-.33;2.17]	.01	1.57	.119
Self-distraction	-.12	-1.26[-2.99;.67]	.02	-1.90	.06
Denial	-.18	-1.85[-3.35;-.33]	.03	-2.71	.007
Venting	-.24	-2.49[-3.93;-1.09]	.06	-3.68	.000
Substance abuse	-.19	-1.53[-2.61;-.59]	.04	-2.96	.003
Behavioral disengagement	-.13	-1.17[-2.29;.07]	.02	-2.04	.042
Self-blame	-.26	-1.93[-2.90;-.94]	.07	-4.06	.000

Source: Authors' research.

Final multiple linear regression model revealed that students who used more frequently positive reframing ( $\beta = 0.18$ ;  $p = 0.005$ ), turning to religion ( $\beta = 0.16$ ;  $p = 0.009$ ) and searching for emotional support ( $\beta = 0.16$ ;  $p = 0.014$ ) were less prone to developing burnout syndrome. What is more, students that more frequently coped with stressful situations by denial ( $\beta = -0.18$ ;  $p = 0.005$ ) and venting ( $\beta = -0.22$ ;  $p = 0.001$ ) were at higher risk of burnout syndrome. The variation of the student school burnout was explained in 17% of five variables ( $F_{(1,228)} = 10.07$ ,  $p < 0.0001$ ,  $\Delta R^2 = 0.17$ ).

## Discussion

In this study we investigated a coping mechanism that might be a potential factor of the development of school burnout syndrome among adolescents. Following the main result of the study, 17% of the variances were explained by the coping strategies, i.e. higher positive reframing, turning to religion and searching for emotional support, and lower denial and venting. We hypothesized that maladaptive coping strategies would have a stronger prediction power in explaining burnout among adolescents. However, we did not confirm this hypothesis. In addition, the regression models indicated that positive reframing and self-blame had the highest standardized regression coefficients. What is more, venting emotions, substance abuse, turning to religion and denial also significantly predicted the level of student burnout, however with the lower prediction power. Shin et al. (2014) and Spataro et al. (2016) came to similar results. Sign et al. (2016) found the negative associations between acceptance, positive reframing, humor, planning, and active coping correlated with perceived stress. Prior studies revealed that burned out persons during a stressful situation tend to concentrate on themselves believing they lack personal resources to cope and present maladaptive avoidance coping (Trindade et al., 2009). Recently, Bakker and de Vries (2021) in the JD-R theory stated that the cause of the burnout symptoms escalation is directly related to deficits in flexibility of coping mechanisms. As a consequence, the person is unable to select the coping strategy that is tailored to the problematic situation and start to present maladaptive behaviors. According to the abovementioned model this is the main reason for increasing the level of psychological distress and the severity of mental problems.

Health professionals who have high levels of emotional exhaustion are characterized with low levels of functional coping and high levels of dysfunctional coping (Cumbe et al., 2017). Unhealthy coping strategies used by burned out individuals generate suffering and frustration at work and school, decreasing the chance of solving the problem (Trindade et al., 2009). The significant negative correlations between emotion-focused coping strategies and school burnout indicated that there is an increase in the severity of this syndrome when more frequently using this type of coping. Furthermore, lower positive reframing and emotional support and greater emotion-fo-

cused strategies – except self-distraction – were discovered among high level burnout students. Many previous studies confirmed our results. From research conducted by Basson et al. (2002) the poor coping strategies and mental disengagement were positively related to emotional exhaustion and depersonalization.

## **Limitations**

The findings of this study had several limitations. The cross-sectional design of our study, data-collecting based on self-report measures, and a greater number of girls than boys could affect the final results. As such, the generalizability of our results may be limited. On the basis of our study we may only make an assumption about the general psychological mechanism responsible for the development of the school burnout process, without pointing out the causal relationships. Moreover, it is more probable that the association between stress coping strategies and burnout symptoms is a circular relationship, and it would be worth taking this into account in future studies. The distinction of extreme groups was based only on the overall result of SSBS. One of the main goals of our study was to examine the differences in the frequency of using coping strategies between high and low burnout students. As a result, we included into the samples a relatively low number of students. However, to get the deeper insight into the structure of burnout among adolescents, it would be better to use multivariate analysis (i.e. cluster analysis) which may include the level of burnout dimensions.

What is more, to examine the relationship between coping strategies and burnout we used simple Pearson's analysis. However, in future studies it would be better to use canonical correlation analysis (CCA). CCA is a multivariate technique that enables describing the relationship between more than one set of variables simultaneously in order to examine structural and spatial meaning (Wickramasinghe, 2019); additionally, it limits the risk of Type I error (the rejection of a true null hypothesis) (Thompson, 1991). The scope of our research is also limited due to the fact that only coping strategies' predictors were considered as predictors of school burnout. In addition, developing burnout syndrome is connected with multivariate factors, i.e. personality traits, family and school environment and situational factors.

## Conclusion

Our results confirmed the crucial role of maladaptive coping strategies in increasing burnout among young people. Additionally, positive reframing, turning to religion and emotional support may be protective factors that reduce burnout level among adolescents. From this perspective, more attention should be paid to enhancement of problem-focused coping strategies in preventing high school student burnout.

## References

- Ahola, K., & Hakanen, J. (2014). Burnout and Health. In: M.P. Leiter, A.B. Bakker, & Ch. Maslach (Eds.), *Burnout at Work: A Psychological Perspective* (pp. 10–31). London: Psychology Press.
- Anderson, N., Belar, C., Breckler, S., Nordal, K., Ballard, D., & Bufka, L. (2014). *Stress in America: Are Teens Adopting Adults' Stress Habits?* American Psychological Association.
- Aypay, A. (2012). Secondary School Burnout Scale (SSBS). *Educational Sciences: Theory & Practice*, 12(2), 782–787.
- Bakker, A.B., & Demerouti, E. (2018). Multiple Levels in Job Demands-Resources Theory: Implications for Employee Well-Being and Performance. In: E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of Wellbeing* (pp. 1–13). Salt Lake City, UT: DEF Publishers, doi: nobascholar.com.
- Bakker, A.B., & de Vries, J.D. (2021). Job Demands–Resources Theory and Self-Regulation: New Explanations and Remedies for Job Burnout. *Anxiety, Stress, & Coping*, 34(1), 1–21, doi: 10.1080/10615806.2020.1797695.
- Basson, M., & Rothmann, S. (2002). Sense of Coherence, Coping and Burnout of Pharmacists. *South African Journal of Economic and Management Sciences*, 5(1), 2664.
- Carver, C.S. (1997). You Want to Measure Coping But Your Protocol's Too Long. Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92–100.
- Cumbe, V.F.J., Pala, A.N., Palha, A.J.P., Gaio, A.R.P., Esteves, M.F, Mari, J.J., & Wainberg, M. (2017). Burnout Syndrome and Coping Strategies in Portuguese Oncology Health Care Providers. *Archives of Clinical Psychiatry*, 44(5), 122–126.

- Dix, D.M. (2017). *The Relationship Between Coping Strategies and Burnout for Caregivers of Adjudicated Youth*. Minnesota: Walden University Dissertations and Doctoral Studies
- Freudenberger, H.J. (1974) Staff Burn-Out. *Journal of Social Issues*, 30, 159–165.
- Heffer T, & Willoughby T.A (2017). A Count of Coping Strategies: A Longitudinal Study Investigating an Alternative Method to Understanding Coping and Adjustment. *PLoSOne*, 12(10), e0186057, doi: 10.1371/journal.pone.0186057.
- Maslach, Ch., & Leiter, M.P. (2016). Understanding the Burnout Experience: Recent Research and Its Implications for Psychiatry. *World Psychiatry*, 15(2), 103–111.
- Salmela-Aro, K., Tolvanen, A., & Numri, J. (2009) Achievement Strategies During University Studies Predict Early Career Burnout and Engagement. *Journal of Vocational Behavior*, 75, 162–172.
- Shin, H., Park, Y.M., Ying, J.Y., Kim, B., Noh, H., & Lee, S.M. (2014). Relationships Between Coping Strategies and Burnout Symptoms: A Meta-Analytic Approach. *Professional Psychology: Research and Practice*, 45(1), 44–56, doi: 10.1037/a0035220.
- Shoda, M.A., & Titiloye, M.A. (2019). Perceived Stress and Coping Mechanism Among Medical Students of University of Ibadan, Nigeria. *Acta Scientific Nutritional Health*, 3(9), 128–134.
- Spataro, B.M., Tilstra, S.A., Doris M. Rubio, D.M., & McNeil, M.A. (2016). The Toxicity of Self-Blame: Sex Differences in Burnout and Coping in Internal Medicine Trainees. *Journal of Women's Health*, 25(11), 1147–1152, doi: 10.1089/jwh.2015.5604.
- Suldo, S.M., Shaunessy, E., & Hardesty, R. (2008). Relationships Among Stress, Coping, and Mental Health in High-Achieving High School Students. *Psychology in the School*, 45(4), 273–290.
- Thompson, B. (1991). A Primer on the Logic and Use of Canonical Correlation Analysis. *Measurement and Evaluation in Counselling and Development*, 24, 80–95.
- Tomaszek, K., & Muchacka-Cymerman, A. (2018) Wybrane środowiskowe przyczyny syndromu wypalenia uczniów ze szkół gimnazjalnych [Selected Environmental Causes of Burnout Syndrome Among Students from Lower Secondary Schools]. *Kwartalnik Pedagogiczny*, 2, 109–126.
- Tomaszek, K., & Muchacka-Cymerman, A. (2020). *Wypalenie szkolne u adolescentów. Raport z badań polsko-amerykańskich* [School Burnout Among Adolescents. Report on Polish-American Research]. Kraków: Petrus.



- Trindade, L.L., Lautert, L., & Beck, C.L.C. (2009). Coping Mechanisms Used by Non-Burned out and Burned out Workers in the Family Health Strategy. *Rev Latino-am Enfermagem*, 17(5), 607–612, doi: 10.1590/S0104-11692009000500002.
- Wickramasinghe, N.D. (2019). Canonical Correlation Analysis: an Introduction to a Multivariate Statistical Analysis. *Journal of the College of Community Physicians of Sri Lanka*, 25(1), 37–38, doi: 10.4038/jccpsl.v25i1.8204.
- Wills, T.A. (1986). Stress and Coping in Early Adolescence: Relationships to Substance Use in Urban School Samples. *Health Psychology*, 5(6), 503–529.