Predictors of Burnout Symptoms in Finnish-Swedish Adolescents

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Master Thesis in Psychology

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Abstract:

Burnout rates among adolescents have risen dramatically over the last century. It is a phenomenon recognised by ICD-11 but is not categorized as a diagnosis. Burnout entails feelings of exhaustion, cynicism, and inadequacy, as a result from prolonged occupational stress. Most of the studies concerning burnout have mainly focused on adults and work life, neglecting that adolescents also experience burnout at school. Therefore, it is of importance to investigate what internal and contextual factors are potentially relevant for protecting against the development of burnout during adolescence. Knowledge of such factors could help to prevent the phenomenon from occurring as frequently as it does today. This study examined coping, resilience, and school atmosphere as predictors for burnout symptoms in adolescents. Finnish-Swedish high school students around Finland (N = 284) participated in the study by filling out a questionnaire. Results showed that coping strategies that focus on problem solving and seeking social support were associated with less symptoms of burnout. A positive school atmosphere, especially instilling meaning in students, showed a similar relationship to burnout. Resilience was unexpectedly associated with higher cynicism. Furthermore, females showed higher rates of burnout symptoms than males. These findings suggest that teaching suitable coping strategies and focusing on creating a meaningful school atmosphere could be used in schools as a method of preventing burnout and school-related stress in adolescents. Still, as this study was cross-sectional, no causal relationships could be established. Longitudinal or intervention studies are needed to confirm the direction of relationships between these factors.

Keywords: Burnout, coping, resilience, school atmosphere, adolescence

Level: Master's thesis

PREDICTORS OF BURNOUT SYMPTOMS IN ADOLESCENTS

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Abstrakt:

Mängden symptom på utbrändhet hos ungdomar har ökat dramatiskt under det senaste årtiondet. Utbrändhet är ett fenomen som ICD-11 erkänner, men det kategoriseras inte som en diagnos. Utbrändhet innebär utmattning, cynism och en känsla av otillräcklighet som en konsekvens av långvarig arbetsrelaterad stress. I de flesta studier om utbrändhet har fokus legat på vuxna och arbetslivet, medan få har studerat utbrändhet hos ungdomar i skolan. Därför är det viktigt att undersöka vilka faktorer som bidrar till fenomenet för specifikt ungdomar, eftersom sådan kunskap kunde underlätta det förebyggandet av utbrändhet. Denna studie undersökte coping, resiliens och skolatmosfär som prediktorer för symptom på utbrändhet hos ungdomar. Sammanlagt 284 finlandssvenska gymnasieelever deltog i studien genom att fylla i ett frågeformulär. Resultaten visade att copingstrategier som problemlösning och att söka socialt stöd var associerade med färre symptom på utbrändhet. En positiv skolatmosfär, speciellt en som fokuserar på att ge skolarbetet mening visade en likande koppling till utbrändhet. Högre resiliens var överraskande nog kopplat till högre cynism. Dessutom upplevde flickor mer symptom på utbrändhet än pojkar. Dessa fynd väcker tanken om att det kunde finnas konkreta sätt för skolor att förebygga att så många ungdomar lider av symptom på utbrändhet och skolrelaterad stress. Motsvarande kunskap kunde också användas i kliniska kontext för vård av utbrändhet. Studien hade ändå en tvärsnittsdesign, så inga kausala kopplingar kunde påvisas. Longitudinella eller interventionsstudier skulle behövas för att bekräfta riktningen på förhållanden mellan de olika faktorerna.

Nyckelord: Utmattning, utbrändhet, coping, resiliens, skolatmosfär, ungdomar

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Introduction

According to the Finnish Institute for Health and Welfare (2021), burnout rates among Finnish adolescents have almost doubled during the last decade. In 2021, the prevalence of student burnout was 21.1% for high school students, while the corresponding rate for 2010–2011 was 11%. Both individual characteristics, such as personality and coping styles, and contexts, such as socioeconomic status and school atmosphere, play a role in the risk of developing burnout (Maslach et al., 2001; Walburg, 2014). While many risk factors have been found to influence academic stress and burnout symptoms, most studies focus on academic achievement and school context. Fewer studies have focused on individual characteristics, such as personality traits and strengths, and how they might affect burnout. Moreover, most studies focus on risk factors, while neglecting protective factors (Walburg, 2014). In order for preventive programs and interventions to be effective, it is crucial to identify the prominent predictors for burnout. With such knowledge, we know more about which students run the risk of developing burnout, and could look into resources that could protect them from developing symptoms of burnout. The current study investigated whether three potentially important predictors are associated with burnout symptoms during adolescence. These predictors were resilience, coping methods and school atmosphere.

Burnout is a condition characterized by three dimensions: exhaustion, cynicism, and inefficacy (Maslach et al., 2001). In other words, experiencing burnout entails feeling chronic fatigue, losing interest in, or having a distant attitude to work, and experiencing reduced feelings of competence. Burnout is caused by excessive work stress over a prolonged period of time, without adequate ability to cope with it. While burnout is included in the 11th revision of the International Statistical Classification of

Diseases and Related Health Problems (ICD-11, World Health Organization, 2018), it is not classified as a medical condition or a diagnosis, and it does not appear at all in DSM-V (American Psychiatric Association, 2013). Nevertheless, it can have severe consequences such as increasing the likelihood of depression (Mutkins et al., 2011; Salmela-Aro et al., 2008) and suicide (Pompili et al., 2011).

While burnout in adults has been studied extensively, it is only during the last two decades that research has been extended to include adolescents experiencing symptoms of burnout at school. Even ICD-11 concludes that burnout should only be applied to an occupational context, without taking school stress into account.

Nevertheless, Salmela-Aro and colleagues (2009) investigated burnout in adolescents and came up with a model similar to the one presented for adults. The dimensions they found were (a) exhaustion at school, (b) cynicism toward the meaning of school and (c) a sense of inadequacy.

Methods of Coping with Stress

Coping refers to methods, either cognitive or behavioral, for managing stressful situations (Lazarus & Folkman, 1984). There are numerous types of coping, usually categorized into problem-focused and emotion-focused coping respectively. Problem-focused coping includes methods that focus on changing or managing the problematic and stressful situation by e.g. solving the relevant problem or generating alternative solutions. Emotion-focused coping, in turn, entails managing one's own emotional responses to the situation by e.g. focusing on the positive (Lazarus & Folkman, 1980). Another way to describe different methods of coping is categorizing them into approach or avoidance coping (Holroyd et al., 1989), or otherwise called active or passive coping (Marroquin et al., 2010). These describe how, similarly to problem- or emotion-focused methods, some choose to actively put effort into solving the situation, while others are

more disengaged and focus more on emotional regulation when faced with adversity. While problem-focused coping is relatively straightforward, emotion-focused coping can further be categorized into several subcategories. Coping strategies such as seeking social support, reappraisal, religious coping, meaning-focused coping and acceptance can all be categorized as emotion-focused coping, even though they look inherently different.

In an extensive meta-analysis, Shin and colleagues (2014) found a negative correlation between problem-focused coping and all aspects of burnout, implying that people who actively use problem-focused coping tend to suffer less from symptoms of burnout. Similar results were found among some emotional coping strategies, specifically seeking social support, reappraisal, and religious coping. However, acceptance, another emotional coping strategy, showed a positive correlation with burnout symptoms, which means that using this coping strategy might lead to increased symptoms of burnout.

The current study focused on three methods of coping among adolescents: problem-focused coping and two types of emotion-focused coping, namely stopping unpleasant thoughts and emotions and seeking social support. Moreover, at focus was not only *how* adolescents cope, but also their *confidence in their ability to cope* with different challenges. This is important as confidence in oneself, or high self-efficacy, is a prerequisite to changing one's behavior (Bandura, 1997).

Resilience and Burnout Symptoms

Resilience refers to an individual's overall capability to overcome challenges and hardships, with the help of certain strengths and protective factors (Zolkoski & Bullocks, 2012). It is a complex concept with many definitions, and researchers have yet to find a unified way to operationalize resilience. Definitions of resilience can differ

depending on the level of measurement (e.g., individual, family, organization, society, culture), and what type of challenge one is facing (e.g., receiving a cancer diagnosis, enduring war or suffering from chronic psychopathology). Therefore, defining different types of resilience depending on context might be the better way forward (Southwick et al., 2014). When examining children who have overcome adversity, three main types of psychological resilience have emerged: (1) overcoming the odds, (2) stress-resistance, and (3) recovery (Masten et al., 1990). These three types have also been renamed as overcoming, steering through, and bouncing back (Reivich & Shatté, 2002).

Overcoming refers to children who enjoy good outcomes in life, even though they are from a high-risk background. Steering through, in turn, refers to sustained competence under stress. Lastly, bouncing back is about recovery from trauma. In reference to experienced burnout symptoms, the most relevant form of resilience is steering through.

Resilience can be seen as both a trait, relating to personality traits, strengths, and resources, and as a state: a context-dependent adaptive process, strongly related to social support (Fergus & Zimmerman, 2005). Wagnild and Young (1993) found five personality components that contributed to resilience in individuals, namely equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness. When compared to personality traits from the Five Factor theory (Costa & McCrae, 1992), more commonly known as the Big Five theory, resilience had a negative correlation to neuroticism, and a positive association with the rest of the traits: extraversion, openness, agreeableness, conscientiousness. However, the strongest relationships with resilience were found with neuroticism, extraversion, and conscientiousness (Oshio et al., 2018). Based on this, resilient individuals would be less prone to anxiety and worry, more engaged in social activity, more motivated and have higher self-control. Other factors, such as competence, coping skills, self-efficacy and social support have also been found

to positively promote resilience (Fergus & Zimmerman, 2004). Within the frame of the current study resilience is viewed as a trait, built upon the theoretical framework of Wagnild and Young (1993), while acknowledging that both internal and contextual factors play a crucial part in the development of a resilient individual.

The Effects of School Atmosphere on Student Well-Being

While internal factors can play a significant role in the development of burnout, it is nonetheless a condition created under stress. Occupational stress occurs when the demands of a work or study environment exceed an individual's psychological resources (Lazarus & Folkman, 1984). Therefore, when investigating burnout in adolescents, it is important to look at the school context as well. Earlier studies have shown that the social climate and school atmosphere has an effect on adolescents' burnout symptoms and stress levels. Social support has shown a negative association with stress, which in turn has a negative effect on health and well-being (Glozah & Pevalin, 2014). One study found that a supportive school atmosphere has a protecting effect against developing burnout at school (Salmela-Aro et al., 2008), while another study found that students' perceived motivation and academic self-competence mediate the said relationship (Marchant et al., 2001). A direct relationship between school social capital and burnout has also been found (Lindfors et al., 2018).

Another important predictor of burnout that is relevant to investigate when looking at the relationship between burnout and school atmosphere is academic achievement. Academic achievement has been closely linked to symptoms of stress and burnout, suggesting that burnout symptoms or academic stress predict lower academic achievement and vice versa (Madigan & Curran, 2020; Ye et al., 2019). Life satisfaction and academic achievement have also been shown to have a reciprocal positive effect on one another (Ng et al., 2015). At the classroom level, more positive affect and a

supportive homeroom teacher is related to higher academic achievement, while more negative affect is related to less academic achievement (Kashy-Rosenbaum et al., 2018). Some studies, however, point out that the relationship between well-being and academic achievement is more complex. Steinmayr and collegues (2016) found that better academic achievement predicted positive changes in life satisfaction, but did not affect the students' mood level. Furthermore, they did not find that life satisfaction would affect students' academic achievement. Another study regarding the subject found a bidirectional relationship, and that especially for females, higher academic achievement predicted lower subjective well-being one year later (Bortes et al., 2021). If both low and high academic achievement could predict burnout symptoms and lower subjective well-being, it is important to further examine which other factors could moderate to the relationship between academic achievement and experiencing symptoms of burnout.

When examining students with high academic achievements, it has been found that different types of achievement goal orientations have different effects on students' well-being. Students with performance tendencies, compared to e.g., mastery-oriented students, show higher levels of school-related burnout (Tuominen et al., 2008). It has also been found that students who apply a deep approach in learning experience less burnout, while students with surface level approaches experience burnout more often (Asikainen et al., 2020). Students' self-efficacy regarding academic, social and emotional competence also has a negative association with burnout, specifically exhaustion and cynicism (Bilge et al., 2014). Moreover, belonging to a high-achieving peer group protects group members from developing burnout (Kiuru et al., 2008). School atmosphere could potentially affect students' achievement goal orientation, performance tendencies, self-efficacy, and social inclusivity. Therefore, it is important to include some indicator on the school context when examining burnout in adolescents.

The Current Study

The current study investigated the role of certain potentially important predictors of student burnout. Knowledge of key predictors may point to ways to prevent students from developing burnout and create relevant resources for schools and individuals to combat this constantly worsening problem. In the current study, burnout is not viewed as a diagnosis with a fixed clinical cut-off, but instead as a continuum ranging from school-related stress to major burnout. The predictors at focus here were resilience and coping as internal factors, as well as school atmosphere as a contextual factor. Based on earlier research, the hypotheses were that all presented factors would have negative correlations with burnout symptoms, but that scales measuring problem-focused coping and social support would show the strongest associations.

Materials and Methods

Participants

The current study focused on Swedish-speaking upper secondary school students in Finland. Participants were recruited to the larger intervention study "Study with Strength". In total, 373 students from nine schools participated in the study. The response rate was 76.1%, meaning 284 participants filled out the baseline questionnaire. While participation in the study was completely voluntary, one of the nine schools made the intervention program mandatory for all students. Demographics of participants are shown in Table 1.

¹Study with Strength (*swe: Studera Starkt*) is a collaborative research project between Helsinki University and Folkhälsan Research Center that aims to investigate whether positive psychology interventions work to increase well-being in Swedish-speaking upper secondary schools in Finland. The intervention is built on evidence-based methods used to increase well-being. The intervention included 17 lessons during approximately 8 weeks, each lesson being around 75 minutes long. The study had a waitlist design. Themes such as positive emotions, strengths, mindset and mindfulness were a part of the intervention.

Table 1. Demographic properties of the participants

	Frequency	Percent
Gender		
Female	219	77.1
Male	64	22.5
Other	0	.0
Age		
15	1	.4
16	111	39.1
17	93	32.7
18	73	25.7
19	5	1.8
Economic situation		
Very good	61	21.5
Good	157	55.3
Okay	58	20.4
Bad	8	.4
Very bad	0	.0

Note: One participant did not report gender or age. Economic situation was measured by asking participants to subjectively define their family's/families' economic situation.

Procedure

The study was approved by the University of Helsinki Ethical Review Board in the Humanities and Social and Behavioral Sciences. Nine Finnish upper secondary schools were recruited for the research project "Study with Strength" for participation in a positive psychology intervention during the autumn of 2020 and spring of 2021. Participating students filled out consent forms and were informed about the purpose of the study and that they could retract their participation and consent at any time. Subsequently, participating students were asked to fill out a questionnaire measuring different aspects of their well-being, both before and after the intervention, as well as a follow-up questionnaire at the end of the school year. Some students filled out the questionnaire at school, while others filled it out in their spare time. The data was analysed with a series of regression analyses on IBM SPSS 26 Statistics.

Instruments

The questionnaires used for investigating the research topic were the following: $School\ Burnout\ Inventory$ (SBI; Salmela-Aro et al., 2009) is a questionnaire measuring an individual's experience of burnout symptoms, aimed towards students. It is built on Maslach's (2001) theoretical definition of burnout, and the Bergen Burnout Indicator questionnaire (Näätänen et al., 2003). The symptoms are categorized into three dimensions: (a) exhaustion at school, (b) cynicism toward the meaning of school and (c) sense of inadequacy at school. It contains 10 items rated on a 6-point scale. A mean score is counted from the total scale and the three subscales. However, one of the items has proven poor discriminant validity (Salmela-Aro et al., 2009) and was thus discarded from the analyses. Without this single item, Salmela-Aro and colleagues (2009) reported that the questionnaire has good internal consistency ($\alpha = .88$), test-retest reliability and validity, including concurrent validity, when measured against depressive symptoms. Some example questions are "I feel like I'm drowning in schoolwork", "I often wonder if my schoolwork has any meaning" and "I often feel inadequate at school".

Coping Self-Efficacy Scale (CSE; Chesney et al., 2006) is a questionnaire measuring how well participants think they cope with challenges or threats. The scale is divided into three subscales: (a) use problem-focused coping, (b) stop unpleasant emotions and thoughts and (c) get support from friends and family. There are 26 items in total, rated on an 11-point scale. These are added up to a sum score of the full scale as well as sum scores for the three subscales. Examples of questions are "I can figure out what I can change and what I cannot change", "I can find something positive in a negative situation" and "I can get new friends". The scale has shown good internal consistency ($\alpha = .95$), test-retest reliability and validity, including concurrent validity, when compared to other questionnaires regarding stress and coping theory.

The Resilience Scale (RS-14; Wagnild & Young, 1993) is a questionnaire measuring perceived trait-like resilience. Originally the questionnaire included 25 items, while the short version used in the current study contains 14 items. The items are rated on a 7-point scale and added up to a total sum score. Examples of included questions are "I usually manage one way or another", "When I'm in a difficult situation, I can usually find my way out of it" and "I feel like I can handle many things at a time". Studies examining RS-14 as a measure of adolescent resilience have shown good internal consistency (α = .91) and validity across different subgroups, such as ethnicity, gender, geographic region and age (Pritzker & Minter, 2014). While the longer version of the questionnaire has four subscales, the shortened version does not categorize the questions into subscales.

Positive Practices Survey (PPS; Cameron et al., 2011) was initially developed to measure organizational climate, and has been adapted for a high school environment for this study. The questionnaire consists of 29 items, categorized into six subscales: (a) respect, integrity, and gratitude, (b) compassionate support, (c) caring, (d) meaning, (e) inspiration and (f) forgiveness. The items are rated on a 5-point scale and a mean score is counted for the full scale and each of the six subscales. The subscales have shown good internal consistency (from α = .85 to α = .96). Some questions from the survey are "We show appreciation for one another", "We see the larger purpose in our schoolwork" and "We do not blame one another when mistakes are made". The questions were otherwise identical to the original PPS, but work-related words were changed to school-related words.

Results

In order to investigate the relationships between resilience, coping, school atmosphere and burnout, a series of multiple regression analyses were conducted.

Before these analyses, relevant statistical assumptions were examined. For all variables except economic situation, assumptions of multivariate normality, linear relationships between the independent and dependent variables, and homoscedasticity were met. Furthermore, multicollinearity statistics were acceptable (Tolerance > .79, VIF < 1.25 for all variables). The data was also examined for extreme outliers, but none were found. For economic situation, the distribution of its values was negatively skewed, and was therefore not analysed further. In conclusion, all assumptions for conducting regression analyses were met for the rest of the variable.

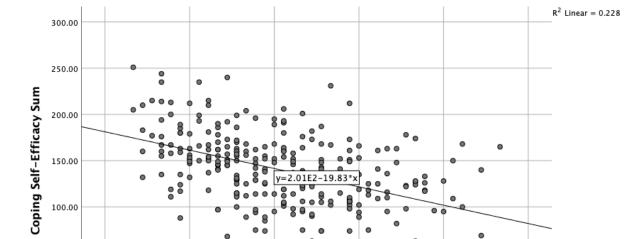
First, a two-step hierarchical multiple regression analysis was conducted with burnout symptoms as the dependent variable to explore the different relationships between the different predictors and burnout symptoms. Gender and age were entered at step one, while the scales measuring coping self-efficacy, resilience and school atmosphere were added at step two. The step one model significantly explained 6.1% of the variance in burnout symptoms (F(2:280) = 9.11, p < .001, r = .25). While age did not predict burnout symptoms (B = .03, SE = .07 p = .602), gender had a significant effect, so that being female predicted more symptoms of burnout (B = .56, SE = .13, p < .13.001). When entering the predictors of step two, the new model significantly explained an additional 24.8% of the variance, adding up to a total of 30.9% of variance explained (F(5:277) = 24.77, p < .001, r = .56). Regarding the individual predictors, significant effects were found with coping self-efficacy (B = -.01, SE = .00, p < .001) and school atmosphere (B = -.34, SE = .08, p < .001). Higher scores on both coping self-efficacy and school atmosphere predicted less burnout symptoms. These results are depicted in Figure 1 and 2. The relationship between resilience and burnout was, unexpectedly, positive, so that higher scores on resilience predicted more burnout symptoms. This effect, however, was only close to significant (B = .01, SE = .00, p = .060). These

50.00

1.00

2.00

results support hypotheses for coping and school atmosphere, but do not for resilience. In addition, the same analysis was conducted only with female participants, so that only age was entered as stage one. This was done since the sample contained only 22.5% males, but these results did not differ from the results containing all participants.



School Burn-Out Inventory Mean

Figure 1. Scatterplot with regression line for burnout symptoms and coping self-efficacy

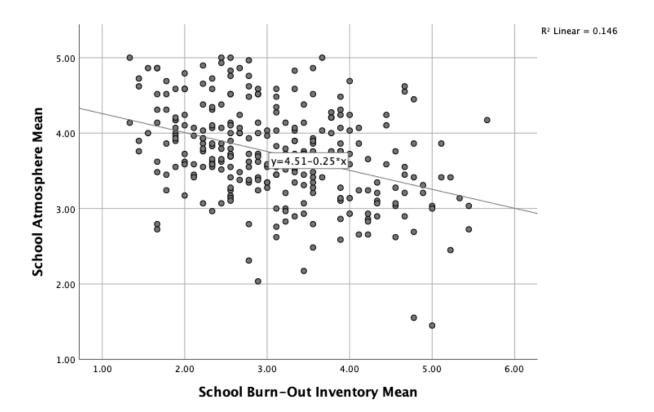
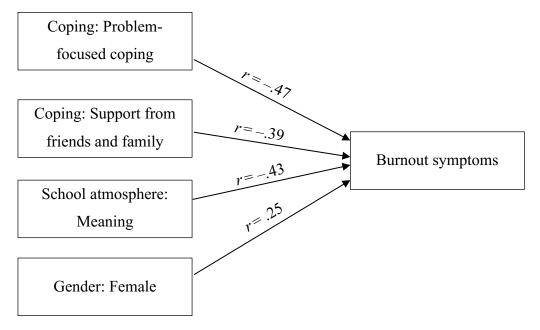


Figure 2. Scatterplot with regression line for burnout symptoms and school atmosphere

Furthermore, the scales measuring coping self-efficacy and school atmosphere were examined further, to see whether all subscales predicted burnout symptoms, or whether specific subscales could give more information about the relationships. First, a multiple regression analysis was conducted to analyse different strategies of coping self-efficacy. Results showed that subscales measuring problem-focused coping (B = -.02, SE = .00, p < .001) and getting support from friends and family (B = -.02, SE = .01, p = .012) were significant, so that higher scores on these subscales were associated with less burnout symptoms. The subscale measuring the coping method of stopping unpleasant thoughts and emotions was not significant (B = -.001, SE = .005, p = .828). The multiple regression model showed similar explanatory value as the primary analysis, F(3;280) = 29.61, p < .001, r = .49, $r^2 = .24$.

Next, a similar multiple regression analysis was conducted to further analyse the subscales of the scale measuring school atmosphere. Results showed that only the subscale measuring meaning was significant (B = -.44, SE = .08, p < .001), so that higher results on this subscale predicted less burnout symptoms. The subscales measuring respect, integrity, and gratitude (B = -.12, SE = .13, p = .353), caring (b = -.15, SE = .10, p = .129), and forgiveness (B = -.01, SE = .07, p = .923) were non-significant, but still in the direction of the hypothesis, while the subscales compassionate support (B = .08, SE = .13, p = .512) and inspiration (B = .014, SE = .07, p = .878) showed a non-significant positive relationship with burnout symptoms. The multiple regression model showed similar explanatory value as the primary analysis, F(6;277) = 8.78, p < .001, r = .45, $r^2 = .21$. The results are depicted visually in Figure 3.

Figure 3. Significant predictors in the multiple regression models



Note: All presented correlations were significant at the .01 level.

Examining Burnout Subscales

Moreover, the subscales of burnout, namely exhaustion, cynicism, and inadequacy, were investigated separately with multiple regression analyses to see whether the predictors affected certain symptoms more than others. Regarding *exhaustion*, the only significant predictor was problem-focused coping, which showed a negative association (F(10,273) = 5.86, p < .001, r = .42). This model explained 17,7% of the variance for exhaustion. Problem-focused coping was the only significant predictor to the symptom *inadequacy*, too, showing a similar negative association (F(10,273) = 5.58, p < .001, r = .41). For inadequacy, the predictors explained 17% of the variance. However, problem-focused coping was not significantly associated with *cynicism*. Instead, resilience had a significant positive relationship, and the school atmosphere subscale measuring meaning had a significant negative relationship with cynicism (F(10,273) = 13.62, p < .001, r = .58). This model explained 33.3% of the variance. The results are presented in further detail in Table 2.

Table 2. Results from multiple regressions analyses with the separate burnout subscales as dependent variables

Outcome variable	Predictor	В	SE	Standardized β	t	p
SBI – Exhaustion	CSE – Problem-based coping	01	.01	24	-2.51	.013
	CSE – Stop unpleasant thoughts and emotions	00	.01	06	-0.70	.483
	CSE – Support from friends and family	01	.01	08	-1.09	.276
	RS-14	.00	.00	.03	0.53	.597
	PPS – Respect, integrity, and gratitude	14	.15	09	-0.94	.350
	PPS – Compassionate support	.07	.15	.05	0.51	.612
	PPS – Caring	11	.12	09	-0.97	.332
	PPS – Meaning	09	.10	07	-0.94	.346
	PPS – Inspiration	.08	.10	.06	0.74	.457
	PPS – Forgiveness	.04	.08	.03	0.44	.660
SBI – Cynicism	CSE – Problem-based coping	01	.01	15	-1.72	.087
	CSE – Stop unpleasant thoughts and emotions	.00	.01	.01	0.16	.877
	CSE – Support from friends and family	01	.01	07	-1.06	.291
	RS-14	.01	.00	.13	2.38	.018
	PPS – Respect, integrity, and gratitude	.06	.17	.03	0.33	.744
	PPS – Compassionate support	05	.16	03	-0.33	.744
	PPS – Caring	00	.13	003	-0.03	.974
	PPS – Meaning	72	.11	42	-6.77	.000
	PPS – Inspiration	.02	.12	.01	0.14	.886
	PPS – Forgiveness	03	.09	02	-0.35	.726
SBI – Inadequacy	CSE – Problem-based coping	02	.01	22	-2.30	.022
	CSE – Stop unpleasant thoughts and emotions	.00	.01	.01	0.09	.928
	CSE – Support from friends and family	01	.01	10	-1.35	.178
	RS-14	.00	.00	.04	0.64	.525
	PPS – Respect, integrity, and gratitude	25	.19	13	-1.28	.200
	PPS – Compassionate support	.14	.19	.07	0.73	.465
	PPS – Caring	12	.15	08	-0.78	.434
	PPS – Meaning	13	.12	07	-1.05	.294
	PPS – Inspiration	02	.13	02	-0.18	.857
	PPS – Forgiveness	.02	.10	.01	0.14	.886

Note: SBI=Student Burnout Inventory; CSE=Coping Self-Efficacy Scale; RS-14=Resilience Scale; PPS=Positive Practices Survey

Discussion

The aim of the current study was to investigate how coping strategies, resilience and school atmosphere may act as protecting factors against developing symptoms of burnout in adolescents. Results showed that high coping self-efficacy and a good school atmosphere were related to less experienced burnout symptoms, as predicted. The relationship between resilience and burnout symptoms showed an unexpected positive association, although this relationship was non-significant. Furthermore, the analyses also showed that females experienced more burnout than males.

Problem-Focused Coping and Social Support as Predictors of Less Burnout

The relationship between coping self-efficacy and burnout symptoms was in line with earlier findings (Shin et al., 2014). Coping was, in general, negatively associated with burnout symptoms, and worked as the strongest predictor when compared to resilience and school atmosphere. When examining different methods of coping, namely problem-focused, stopping unpleasant thoughts and emotions and seeking support from friends and family, only the problem-focused coping and seeking support were significant predictors for burnout symptoms. These relationships were medium-sized, although problem-focused coping was close to being strong. Furthermore, problem-focused coping was significantly associated with less exhaustion and less feelings of inadequacy but did not have a significant relationship with cynicism.

Seeking social support was significantly related to only the burnout scale as a whole.

An explanation as to why these methods of coping had stronger associations with burnout could be connected to the nature of burnout as a syndrome. As burnout is characterized by an excessive amount of stress over a prolonged time (Maslach et al., 2001), concrete solution-focused methods such as decreasing the workload are more

effective than trying to stop unpleasant emotions and thoughts, by e.g., trying to find the positive in the situation. Emotion-focused coping, such as acceptance, reappraisal and meaning-focused coping, does not seem to be useful when suffering from burnout symptoms, but it can be useful in other kinds of challenges. For example, acceptance, as used in acceptance and commitment therapy, has been proven to be useful for people with a chronic illness (Öst, 2014), and meaning-focused coping can be useful in less situation-specific problems (Folkman, 2008) such as anxiety related to climate change (Ojala, 2016).

Seeking social support, in turn, could be effective in preventing burnout because of how friends and family can be supportive while making decisions about stressors and give concrete help with finding solutions for how to deal with stress. A healthy social life also balances the focus on work in everyday life and helps with distancing oneself from work. Positive relationships are one of the pillars of well-being in general (see e.g., Ryff, 1989; Seligman, 2011), which supports the encouraging results regarding seeking social support. However, when looking at specific burnout symptoms, seeking social support did not have a significant relationship with any one of them, only with the burnout scale as a whole.

The Unexpected Relationship Between Resilience and Burnout Symptoms

While the association between resilience and burnout symptoms in general was non-significant, it was not far from significant and the direction of the results was opposite to the pre-stated hypothesis, revealing a positive relationship. This meant that adolescents who saw themselves as more resilient also experienced somewhat more burnout symptoms. Furthermore, a significant positive relationship was found between resilience and the burnout subscale cynicism. These relationships were surprising, since

resilience in theory points to a psychological tolerance against developing symptoms of psychopathology when faced with challenges and hardships.

As resilience can be operationalized in different ways, there is no universal definition of what traits resilient individuals have, or even if resilience is a trait or a state. Therefore, different questionnaires measure different ways of being resilient. The RS-14 questionnaire used in the current study views resilience as a positive personality characteristic that enhances individual adaptation (Ahern et al., 2009). When developing the questionnaire, five personality components were found to contribute to a resilient individual: equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness (Wagnild & Young, 1993). While the questionnaire has previously shown moderate correlations with constructs that are linked with resilience, such as depression (r = ..37) and life satisfaction (r = .30), results from the current study suggest that these components can contribute to higher burnout symptoms as well. For example, questions belonging to the components perseverance (e.g. "I usually manage one way or another") and self-reliance (e.g. "I feel that I can handle many things at a time) could also measure how much individuals push themselves into achieving more, perhaps more than they can handle.

The idea that there are universal protective factors are thus not supported by these results. Instead, the idea that different risks require different traits to protect individuals are more likely based on the current study (Crosnoe et al., 2002; Gutman et al., 2002). Perhaps adolescents who have more concrete methods of coping are the most resilient ones specifically against burnout symptoms, in the word's true definition. Especially since the work in upper secondary school requires much conscious effort, not just confidence in oneself. Moreover, it is important to note that resilience is not only a

trait, but that the context also plays a crucial role for the outcome (Fergus & Zimmerman, 2005).

Another possible explanation as to why individuals who saw themselves as more resilient experienced more burnout symptom may be that the belief that one is a resilient person steers a person more than resilience itself. Perhaps adolescents cannot measure their own resilience adequately, leading them to believe they are more resilient than they really are. If one has the mentality of believing or wanting to believe that one can get through anything, one might push oneself into achieving more than one can handle, which leads to elevated burnout symptoms.

A Positive School Atmosphere Predicts Less Burnout Symptoms

Results showed that a more positive school atmosphere was associated with less burnout symptoms in adolescents and was the strongest predictor for less cynicism towards school. More specifically, students who found their school atmosphere uplifting, motivating, and therefore their schoolwork as meaningful, experienced less symptoms of burnout. These results are in line with earlier research on the relationship between school atmosphere and burnout (Marchant et al., 2001; Salmela-Aro et al., 2008). Interestingly, the only significant subscale was meaning, even though the other subscales were hypothesized to show similar relationships to burnout. Especially the results concerning the subscales measuring compassionate support and caring were surprising, as the subscale measuring seeking social support as a coping strategy showed a significant relationship to burnout. Earlier studies have also shown that social support in a school context acted as protective factors against stress and burnout (Kiuru et al., 2008; Glozah & Pevalin, 2014). A possible explanation to why seeking social support as a coping strategy was linked to less symptoms of burnout while compassionate support and a caring school atmosphere were not, could be that seeking

social support as a conscious effort is more effective than simply having a supportive environment. Moreover, a supportive and caring school atmosphere does not imply that individual students have close relationships, which might be a more important factor in preventing burnout.

Implications

Results from this study have implications for both clinical and school contexts. It is evident that burnout is a condition with severe consequences, and the results of this study point towards methods that potentially could help adolescents in preventing symptoms of burnout. Schools could emphasize teaching efficient problem solving, planning, and carrying out plans when faced with difficulties. Other abilities that, according to the current study, are associated with less symptoms of burnout are seeing things from different perspectives, being assertive and standing up for what you want, impulse control, seeking social support, finding new friends, and developing new hobbies. All of these abilities could be taught and practiced in a school setting.

Students who found their schoolwork as meaningful experienced less symptoms of burnout, which is something schools could utilize. Teaching students *why* it is important to learn, not only *that* it is important to learn, could make a difference in student well-being. This could also make more students mastery-oriented instead of performance-oriented, which has a previously proven association with less symptoms of burnout (Tuominen et al., 2008). All of the points mentioned are important for the clinical context as well, as the same factors could be used in treatment for burnout or school-related stress.

While demographics of the participants was not the main interest of the current study, the gender differences in burnout experiences still were apparent. Because of this, it would be important to further speculate upon how females could be supported more in

school environments, to prevent this gender gap. These results are in line with other Finnish studies, showing that males suffer less than half as much from burnout than females (Finnish Institute for Health and Welfare, 2021). Moreover, this study could not investigate how socioeconomic status would affect the presented relationships, since close to none of the participants had lower socioeconomic statuses. An important group is therefore missing completely from the current study.

Strengths and Limitations

The current study does not provide any information on causal relationships between the presented factors, as it is cross-sectional. It is therefore not possible to establish whether the factors in fact predict burnout or simply co-exist. Therefore, longitudinal studies are needed to investigate the nature of the relationships further. Moreover, intervention studies could give information on whether changing the school atmosphere and teaching coping methods could affect burnout levels in adolescents. Such interventions could e.g., be positive psychology interventions.

Another limitation of the study is the fact that all results are based on selfobservation questionnaires. While this gives important information on how participants
view themselves, questionnaires cannot be taken as objective observations of a
phenomenon. As discussed earlier, participants might view their own capabilities higher
than they actually are. It is also impossible to know whether participants have
responded to the questionnaire truthfully, since participants could also answer the
questions based on what they think the researchers want to know or what appears
socially acceptable.

The population studied in this paper is a minority population in Finland. Swedish is one of the two official languages of Finland but is only spoken by 5.2% of the population (Official Statistics of Finland, 2021). Swedish-speaking Finns live

mostly on the coastline of Finland and generally have moderate to high socioeconomic statuses, which is also true in this study. This study therefore represents the population of Swedish-speaking Finns rather well but should be generalized to other populations with caution. Moreover, the population included only high school students, and not students in vocational upper secondary education or students who did not continue their education after comprehensive school.

Conclusion

The prevalence of burnout in adolescents in Finland is high and increasing. Therefore, it is important to investigate which students are at risk for developing burnout and finding appropriate resources to support them. Results from the current study showed that using methods of coping, especially problem-focused methods and seeking support from friends and family, is associated with less burnout symptoms. A positive school atmosphere was also associated with less burnout symptoms, specifically when students feel motivated and feel like their work has meaning.

Resilience had a surprising positive relationship with cynicism, so that students who reported being more resilient also experienced higher levels of cynicism. Reasons as to why adolescents who perceive themselves as resilient might experience more burnout symptoms should be investigated with further research. The current study concludes that there are potential ways of preventing burnout in adolescents, such as focusing on teaching adolescents efficient coping skills, and providing supportive social surroundings and meaning to their schoolwork.

Summary in Swedish – Svensk sammanfattning

Prediktorer för utbrändhetssymptom hos finlandssvenska ungdomar

Introduktion

Utbrändhet hos ungdomar är ett tillstånd som kännetecknas av tre dimensioner: utmattning i skolan, cynism mot meningen med skolan och en känsla av otillräcklighet (Salmela-Aro m.fl., 2009). Att uppleva utbrändhet innebär med andra ord att man känner kronisk trötthet, att man tappar intresset för eller har en distanserad inställning till skolan och har en känsla av att ha tappat sin kompetens. Utbrändhet klassas inte som en diagnos (American Psychiatric Association, 2013; Världshälsoorganisationen, 2018), men kan ändå leda till allvarliga konsekvenser som ökad risk för depression (Mutkins m.fl., 2011; Salmela-Aro m.fl., 2008) och självmord (Pompili m.fl., 2011). Enligt Finlands institut för hälsa och välfärd (2021) har andelen utbrändhet bland finländska ungdomar nästan fördubblats under det senaste decenniet. År 2021 var prevalensen för utbrändhet 21,1 % för gymnasieelever, medan motsvarande siffra för 2010–2011 var 11 %. På grund av detta är det viktigt att undersöka hurdana individuella och kontextuella faktorer som bidrar till att ungdomar utvecklar symptom på utbrändhet. Med denna kunskap skulle man kunna skapa effektiva interventioner för att förebygga och vårda utbrändhet hos unga. Denna studies syfte är att utforska tre möjliga prediktorer för utbrändhet: coping, resiliens och skolatmosfär.

Med coping avses metoder som används för att hantera stressiga situationer (Lazarus & Folkman, 1984). Det finns olika slags copingstrategier, och de kategoriseras vanligtvis som antingen problem- eller emotionsfokuserad coping. Problemfokuserad coping innefattar metoder som fokuserar på att förändra eller hantera den problematiska eller stressiga situationen. Detta görs till exempel genom att generera olika lösningar till ett problem. Emotionsfokuserad coping, i sin tur, handlar om att hantera sina egna

känslomässiga responser på situationen, till exempel genom att fokusera på det positiva (Lazarus & Folkman, 1980). I en omfattande metaanalys kom Shin med flera (2014) fram till att personer som aktivt använder problemfokuserad coping tenderar att lida mindre av symptom på utbrändhet. Liknande resultat hittades bland vissa känslomässiga copingstrategier. Att använda sig av acceptans, en slags emotionsfokuserad copingstrategi, kan ändå leda till en förvärring av utbrändhetssymptom. Den aktuella studien fokuserade på tre copingstrategier bland ungdomar: problemfokuserad coping och två typer av emotionsfokuserad coping, nämligen att stoppa obehagliga tankar och känslor samt att söka socialt stöd. Dessutom var fokus inte bara på *hur* ungdomar klarar sig, utan också deras *tilltro till sin egen förmåga* att hantera olika utmaningar.

Resiliens, i sin tur, avser en individs övergripande förmåga att övervinna utmaningar och svårigheter med hjälp av vissa styrkor och skyddande faktorer (Zolkoski & Bullocks, 2012). Det är ett komplext koncept med många definitioner, och forskare har ännu inte hittat ett enhetligt sätt att operationalisera resiliens. Då man har undersökt barn som har övervunnit motgångar har tre huvudtyper av psykologisk motståndskraft uppstått: (1) att övervinna oddsen, (2) stresstålighet och (3) återhämtning (Masten et al., 1990). När det gäller upplevda symptom på utbrändhet är den mest relevanta formen av resiliens stresstålighet. Resiliens kan ses både som en egenskap, relaterad till personlighetsdrag, styrkor och resurser, och som ett tillstånd: en kontextberoende adaptiv process, starkt relaterad till socialt stöd (Fergus & Zimmerman, 2005). Wagnild och Young (1993) kom fram till fem personlighetskomponenter som bidrog till resiliens hos individer, nämligen sinneslugn, uthållighet, självförtroende, mening och existentiell ensamhet. Andra faktorer, såsom kompetens, copingstrategier, självförmåga och socialt stöd har också visat sig positivt främja resiliens (Fergus & Zimmerman, 2004).

Även om interna faktorer kan spela en betydande roll i utvecklingen av utbrändhet, är det ändå ett tillstånd som skapas under stress. När man undersöker utbrändhet hos ungdomar är det därför viktigt att även se på deras skolsammanhang. Skolatmosfären verkar ha en direkt effekt på ungdomars symptom på utbrändhet och stressnivåer, så att socialt stöd och en stödjande skolatmosfär fungerar som skyddande faktorer mot att utveckla utbrändhet i skolan (Glozah & Pevalin, 2014; Salmela-Aro m.fl., 2008; Lindfors m.fl., 2018). En annan viktig prediktor för utbrändhet som är relevant att undersöka när man tittar på sambandet mellan utbrändhet och skolatmosfär är skolrelaterad prestation. Olika studier har hittat olika kopplingar mellan skolrelaterad prestation och utbrändhet. Enligt vissa studier finns det ett ömsesidigt förhållande mellan faktorerna, så att sämre prestation har kopplats till symptom på stress och utbrändhet och vice versa, samtidigt som en högre prestation har samband med högre nöjdhet med sitt liv (Madigan & Curran, 2020; Ng m.fl., 2015; Ye m.fl., 2019). Vissa studier påvisar dock att förhållandet mellan välbefinnande och skolrelaterad prestation är mer komplext, till exempel så att högre prestation för flickor predicerade lägre subjektivt välmående ett år senare (Bortes m.fl., 2021). Om både låga och höga prestationer i skolan kan predicera symptom på utbrändhet och lägre subjektivt välbefinnande, är det viktigt att ytterligare undersöka vilka andra faktorer som skulle kunna moderera förhållandet mellan skolrelaterad prestation och att uppleva symptom på utbrändhet. Andra faktorer som kan påverka förhållandet mellan skolrelaterad prestation och utbrändhet är elevers självförtroende vad gäller skolrelaterad, social och emotionell kompetens (Bilge m.fl., 2014) och om man strävar efter att uppnå djupinlärning framom ytinlärning (Asikainen m.fl., 2020; Tuominen m.fl., 2008).

Metod

Syftet med denna studie var att undersöka copingstrategier, resiliens och skolatmosfär som prediktorer för utbrändhet hos ungdomar. Studien fokuserade specifikt på svenskspråkiga gymnasieelever i Finland, som deltog i en större interventionsstudie vid namn "Studera starkt" under hösten 2020 och våren 2021. Totalt deltog 373 elever från nio skolor, och 284 svarade på frågeformuläret som skickades ut till dem. Alla deltagare fyllde i en samtyckesblankett, där de även informerades om studiens syfte och deras rätt till att när som helst dra tillbaka sitt samtycke. Av de som svarade på frågeformuläret var 77,1 % flickor och 22,5 % pojkar, och de var mellan 15 och 19 år gamla. Frågeformuläret bestod av *School Burnout Inventory* (SBI; Salmela-Aro m.fl., 2009), *Coping Self-Efficacy Scale* (CSE; Chesney m.fl., 2006), *Resilience Scale* (RS-14; Wagnild & Young, 1993) och *Positive Practices Survey* (PPS; Cameron m.fl., 2011). Av frågeformulären räknades antingen summapoäng eller medeltal av hela skalan samt av befintliga delskalor. Samtliga frågeformulär visade acceptabla mått på validitet och reliabilitet.

Resultat

För att undersöka sambanden mellan copingstrategier, resiliens, skolatmosfär och utbrändet genomfördes regressionsanalyser. Antaganden för att kunna göra regressionsanalyser fylldes för samtliga variabler. Först gjordes en hierarkisk multipel regressionsanalys i två steg med utbrändhet som den beroende variabeln. Kön och ålder sattes in som steg ett, medan coping, resiliens och skolatmosfär lades in som steg två. Analysen visade att kön hade ett positivt samband med utbrändhet, så att flickor upplevde mer symptom på utbrändhet än pojkar. Coping och skolatmosfär hade i sin tur ett negativt samband med utbrändhet, så att personer som använde sig av mer copingstrategier och som upplevde sin skolatmosfär som mer positiv och stödjande

uppvisade färre symptom på utbrändhet. Ålder och resiliens hade inget signifikant samband med utbrändhet.

Utöver detta gjordes analyser om delskalor för coping och skolatmosfär.

Gällande coping visade enbart problemfokuserad coping och att söka socialt stöd ett signifikant och negativt samband med utbrändhet. Att förhindra otrevliga tankar och känslor som copingstrategi hade inget samband med utbrändhet. Gällande skolatmosfär hade endast delskalan om mening ett signifikant negativt samband med utbrändhet.

Delskalorna som mätte omtanke, förlåtelse, inspiration, empatiskt stöd samt respekt, integritet och tacksamhet hade inget signifikant samband med utbrändhet.

Till sist undersöktes ytterligare de olika symptomen på utbrändhet: utmattning, cynism och en känsla av otillräcklighet. För både utmattning och känslan av otillräcklighet hittades enbart signifikanta samband med problemfokuserad coping. För cynismen hittades signifikanta samband med meningsfull skolatmosfär och resiliens.

Alla andra samband var negativa och därmed i riktning med studiens hypotes, men resiliens och cynism uppvisade ett överraskande positivt samband.

Diskussion

Resultaten från denna studie visade att användning av copingstrategier och en stödjande skolatmosfär minskar sannolikheten för att uppvisa symptom på utbrändhet hos ungdomar. Studien visade också att det fanns ett nästan signifikant samband mellan resiliens och symptom på utbrändhet, men som gick i motsatt riktning till hypotesen. Härnäst diskuteras resultaten vidare.

Sambandet mellan coping och utbrändhet var i linje med tidigare studier om ämnet (Shin m.fl., 2014). Coping hade i allmänhet ett negativt samband med symptom på utbrändhet och fungerade som den starkaste prediktorn gentemot resiliens och skolatmosfär. Då man undersökte specifika copingstrategier närmare såg man att

problemfokuserad coping och att söka socialt stöd var de metoder som fungerade bäst för att förhindra symptom på utbrändhet. En förklaring till varför just dessa copingstrategier fungerade bäst i detta sammanhang kunde vara orsaken bakom utbrändheten. Eftersom utbrändhet kännetecknas av stor stress under en längre tid (Maslach m.fl., 2001) är konkreta lösningsfokuserade metoder som att minska arbetsbelastningen mer effektiva än att försöka stoppa obehagliga känslor och tankar. Att söka socialt stöd kan vara effektivt i att förebygga utbrändhet då vänner och familj både kan finnas där för en samtidigt som de kan ge konkret hjälp med att hitta på lösningar om hur man kan hantera stress. Dessutom ger ett socialt sammanhang en hälsosam balans i livet, och hjälper en att ta avstånd från arbetet på fritiden. Positiva relationer är en av pelarna för välbefinnande i allmänhet (se t.ex. Ryff, 1989; Seligman, 2011), vilket stödjer de uppmuntrande resultaten.

Medan sambandet mellan resiliens och symptom på utbrändhet bara var nära signifikansnivån, så var resultatens riktning motsatta till hypotesen. Ungdomar som såg sig själva som resilienta upplevde alltså fler symptom på utbrändhet. Dessutom hittades ett signifikant samband mellan resiliens och cynism. Riktningen på dessa samband var överraskande eftersom resiliens i teorin betyder en psykologisk motståndskraft mot att utveckla symptom på psykopatologi då man ställs inför utmaningar i livet. En förklaring på detta skulle kunna vara att det inte finns någon universell definition på resiliens, och att varje frågeformulär därmed mäter lite olika saker. RS-14 formuläret ser resiliens som en positiv personlighetsegenskap som förstärker individuell anpassning (Ahern m.fl., 2009). Vid närmare granskning av frågorna i formuläret kunde man ändå notera att vissa av frågorna kunde tolkas att mäta hur mycket individer pressar sig själv till att uppnå mer, vilket i sig kunde leda till mer symptom på utbrändhet. Vidare stöder dessa resultat tanken om att det inte finns några universella egenskaper som gör en individ

resilient, utan att olika svårigheter kräver olika skyddsfaktorer (Crosnoe m.fl., 2002; Gutman m.fl., 2002). Till sist kunde man också tänka sig att individer som ser sig själva som resilienta också tar på sig mer arbete än individer som inte är det. Detta kunde bidra till en större arbetsbörda som i sig kan leda till symptom på utbrändhet.

Den sista faktorn som undersöktes var skolatmosfären. Resultaten från denna studie visade att en mer positiv skolatmosfär var förknippad med färre symptom på utbrändhet hos ungdomar. Det var dessutom den starkaste prediktorn för mindre upplevd cynism mot skolan. Mer specifikt var det elever som tyckte att deras skolatmosfär var upplyftande och motiverande, och därför upplevde sitt skolarbete som meningsfullt, som upplevde mindre symptom på utbrändhet. Dessa resultat stöds av tidigare forskning kring sambandet mellan skolatmosfär och utbrändhet (Marchant m.fl., 2001; Salmela-Aro m.fl., 2008). Intressant nog var detta den enda signifikanta delskalan. Speciellt att delskalorna som mätte empatiskt stöd och omtanke inte hade en signifikant koppling med utbrändhet var överraskande, då socialt stöd som copingstrategi fungerade som en signifikant prediktor för färre symptom på utbrändhet. Även tidigare studier har visat att socialt stöd i skolsammanhang fungerade som en skyddande faktor mot stress och utbrändhet (Glozah & Pevalin, 2014; Kiuru m.fl., 2008).

Resultaten från denna studie skulle kunna överföras till både skolsammanhang och kliniska sammanhang. Huvudfyndet var att effektiv problemlösning samt planering och genomförande av planer då man ställs inför svårigheter kan förebygga ungdomar från att uppleva symptom av utbrändhet. Andra faktorer som kunde förebygga symptom på utbrändhet är enligt denna studie att se saker från olika perspektiv, att stå upp för det man vill, att söka socialt stöd, hitta nya vänner, utveckla nya hobbyer och impulskontroll. Alla dessa faktorer är sådana man både kunde lära ut i skolor i

förebyggande syfte och i kliniska sammanhang med tanke på vård av utbrändhet.

Dessutom kunde skolor fokusera på att göra skolarbetet meningsfullt för eleverna, då

även det kan fungera som en skyddande faktor emot utbrändhet hos ungdomar.

Fastän studien hade några begränsningar, som att inga orsakssamband kunde presenteras då det var en tvärsnittsstudie och att det enbart baserades på självobservationsenkäter, så visade resultaten att det finns ett klart samband mellan coping, skolatmosfär och symptom på utbrändhet. Longitudinella studier och interventionsstudier skulle ändå behövas för att bekräfta orsakssambanden mellan faktorerna.

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.Table 1. Demographic properties of the participants

	Frequency	Percent
Gender		
Female	219	77.1
Male	64	22.5
Other	0	.0
Age		
15	1	.4
16	111	39.1
17	93	32.7
18	73	25.7
19	5	1.8
Economic situation		
Very good	61	21.5
Good	157	55.3
Okay	58	20.4
Bad	8	.4
Very bad	0	.0

Note: One participant did not report gender or age. Economic situation was measured by asking participants to subjectively define their family's/families' economic situation.

Table 2. Results from multiple regressions analyses with the separate burnout subscales as dependent variables

Outcome variable	Predictor	B	SE	Standardized β	t	p
SBI – Exhaustion	CSE - Problem-based coping	01	.01	24	-2.51	.013
	CSE – Stop unpleasant thoughts and emotions	00	.01	06	-0.70	.483
	CSE – Support from friends and family	01	.01	08	-1.09	.276
	RS-14	.00	.00	.03	0.53	.597
	PPS – Respect, integrity, and gratitude	14	.15	09	-0.94	.350
	PPS – Compassionate support	.07	.15	.05	0.51	.612
	PPS – Caring	11	.12	09	-0.97	.332
	PPS – Meaning	09	.10	07	-0.94	.346
	PPS – Inspiration	.08	.10	.06	0.74	.457
	PPS – Forgiveness	.04	.08	.03	0.44	.660
SBI – Cynicism	CSE – Problem-based coping	01	.01	15	-1.72	.087
	CSE – Stop unpleasant thoughts and emotions	.00	.01	.01	0.16	.877
	CSE – Support from friends and family	01	.01	07	-1.06	.291
	RS-14	.01	.00	.13	2.38	.018
	PPS – Respect, integrity, and gratitude	.06	.17	.03	0.33	.744
	PPS – Compassionate support	05	.16	03	-0.33	.744
	PPS – Caring	00	.13	003	-0.03	.974
	PPS – Meaning	72	.11	42	-6.77	.000
	PPS – Inspiration	.02	.12	.01	0.14	.886
	PPS – Forgiveness	03	.09	02	-0.35	.726
SBI – Inadequacy	CSE – Problem-based coping	02	.01	22	-2.30	.022
	CSE – Stop unpleasant thoughts and emotions	.00	.01	.01	0.09	.928
	CSE – Support from friends and family	01	.01	10	-1.35	.178
	RS-14	.00	.00	.04	0.64	.525
	PPS – Respect, integrity, and gratitude	25	.19	13	-1.28	.200
	PPS – Compassionate support	.14	.19	.07	0.73	.465
	PPS – Caring	12	.15	08	-0.78	.434
	PPS – Meaning	13	.12	07	-1.05	.294
	PPS – Inspiration	02	.13	02	-0.18	.857
	PPS – Forgiveness	.02	.10	.01	0.14	.886

Note: SBI=Student Burnout Inventory; CSE=Coping Self-Efficacy Scale; RS-14=Resilience Scale; PPS=Positive Practices Survey

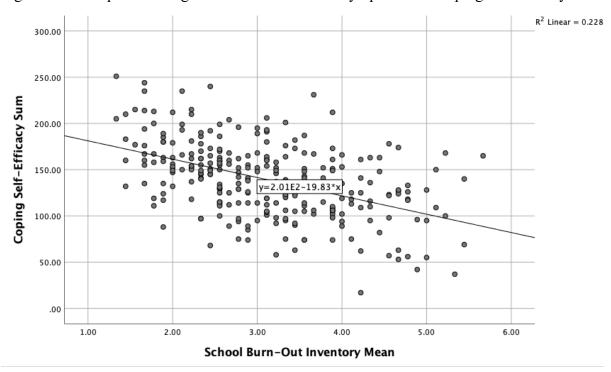


Figure 1. Scatterplot with regression line for burnout symptoms and coping self-efficacy

Figure 2. Scatterplot with regression line for burnout symptoms and school atmosphere

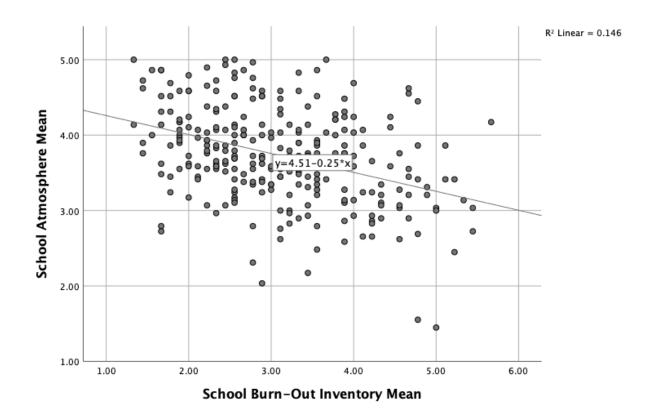
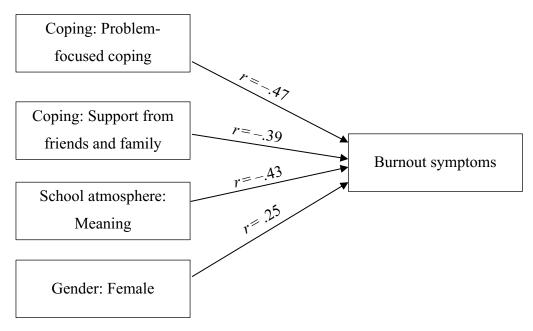


Figure 3. Significant predictors in the multiple regression models



Note: All presented correlations were significant at the .01 level.

PRESSMEDDELANDE

Prediktorer för symptom på utbrändhet hos finlandssvenska ungdomar

Pro gradu-avhandling i psykologi Fakulteten för humaniora, psykologi och teologi, Åbo Akademi

Resultaten från en pro gradu-avhandling vid Åbo Akademi visar att problemfokuserad coping, att söka socialt stöd och en skolatmosfär som fokuserar på att ge skolarbete mening är kopplat till mindre symptom på utbrändhet hos ungdomar. Utbrändhet karakteriseras av utmattning, cynism mot skolan och en känsla av otillräcklighet. Denna studie undersökte olika hur olika copingstrategier, resiliens och skolatmosfär är kopplade till utbrändhet hos finlandssvenska ungdomar. Gällande resiliens, så visade studien att ju högre resiliens ungdomarna såg sig själva ha, desto mer symptom hade de också på specifikt cynism gentemot skolan, vilket var oväntat. Sammanlagt deltog 284 finlandssvenska gymnasiestuderande runtom Finland varav 219 var flickor och 64 pojkar. Materialet samlades in med hjälp av ett frågeformulär. Resultaten tyder på att det finns kopplingar mellan både individuella faktorer och omgivningen till ungdomars upplevelser av utbrändhet. Denna information skulle kunna användas för att skapa interventioner till exempel till skolor vars mål skulle vara att förebygga utbrändhet hos ungdomar. Man kunde även använda denna information då man vårdar utbrändhet eller skolrelaterad stress. Det som ändå är viktigt att poängtera är att detta var en tvärsnittsstudie, och det skulle behövas longitudinella eller interventionsstudier för att bekräfta förhållandet mellan de olika faktorerna.

Forskningen är en del av ett större forskningsprojekt vid Folkhälsans forskningscentrum vid namn "Studera starkt". Forskningen fokuserar på hur man med hjälp av interventioner inom positiv psykologi kan öka ungdomars välbefinnande. Avhandlingen utfördes av Julia Simonsen under handledning av Åse Fagerlund, Mira Karrasch och Matti Laine.

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This guide contains advice to help you get started, but some journals will have specific layout and formatting requirements.

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