

## From Work Life to School: Theoretical Approaches for School Burnout

*Çalışma Yaşamından Okula: Okul Tükenmişliğine Yönelik Kuramsal Yaklaşımlar*

Zekeriya Çam<sup>1</sup> , Selahiddin Öğülmüş<sup>2</sup> 

### Abstract

The concept of burnout, which was dealt within the context of working life in the beginning, has begun to be examined by adapting it to the school environment. Burnout, defined as a decline of energy physically, emotionally and in the feelings of achievement of the work that is being done as well as a decline in the sense of personal achievement, is used similarly to describe school burnout. In recent years, it has been reported that this concept, addressed within the context of school, results in depression, absenteeism, lack of connection with school and dropout. When the literature is examined, it is seen that the approaches to the concept of school burnout in the theoretical sense are mostly conservation of resources theory, demands-resources model, social cognitive theory, existential perspective and developmental process model. The aim of this research to include explanations of the aforementioned theories on school burnout and based on these theories to present suggestions to the field of mental health and future researchers.

**Keywords:** Burnout, school burnout, school burnout theories.

### Öz

İlk zamanlar çalışma yaşamı bağlamında ele alınan tükenmişlik kavramı, daha sonra okul ortamına uyarlanarak incelenmeye başlanmıştır. Fiziksel ve duygusal olarak enerjinin bitmesi, yapılan işe karşı ilgisiz olma ve kişisel başarı duygusunda azalma biçiminde tanımlanan tükenmişlik benzer biçimde okul tükenmişliğinin de tanımlanmasında kullanılmıştır. Son yıllarda okul bağlamında ele alınan bu kavramın, öğrencilerde depresyon, okula devamsızlık yapma, okulla bağ kurmama ve okul terki ile sonuçlandığı rapor edilmektedir. Alanyazın incelendiğinde okul tükenmişliği kavramını kuramsal anlamda ele alınan yaklaşımların daha çok, kaynakların korunması kuramı, talepler-kaynaklar modeli, sosyal bilişsel kuram, varoluşçu bakış açısı ve gelişimsel süreç modeli olduğu görülmektedir. Bu araştırmanın amacı adı geçen kuramların okul tükenmişliğine yönelik açıklamalarına yer vermek ve bu kuramlara dayalı olarak ruh sağlığı alanına ve gelecekteki araştırmacılara öneriler sunmaktır.

**Anahtar sözcükler:** Tükenmişlik, okul tükenmişliği, okul tükenmişliği kuramları.

<sup>1</sup>Muş Alparslan University Faculty of Education, Muş, Turkey

<sup>2</sup>Ankara University Faculty of Educational Sciences, Ankara, Turkey

 Zekeriya Çam, Muş Alparslan University Faculty of Education, Muş, Turkey  
z.cam@alparslan.edu.tr

Submission date: 09.02.2018 | Accepted: 20.03.2018 | Online published: 21.04.2018

**BURNOUT** is proposed as a concept by Freudenberger for the first time (1974). The concept of burnout is conceptualized as a composition of long-term emotional burnout, physical fatigue, not participating in business, removing those receiving service from humanity and low business success. Freudenberger created burnout syndrome as a result of the studies he gained from his clinical experience. In this context, it has been concluded that burnout is widely seen in the service sector and in occupational groups where face-to-face service is provided. However, it was later observed that the burnout was also observed in the blue-collar workers, called the working class (Pines and Aronson 1988). Later on, the concept of burnout was defined as a three-dimensional structure in the form of emotional burnout, desensitization and personal failure and a measurement tool (Maslach Burnout Inventory) was developed in this direction (Maslach and Jackson 1986, Hobfoll and Shirom 2001).

## School Burnout

Although the concept of burnout was addressed as a workplace-related concept in the early times and it has also been studied by being adapted to educational contexts by Educational Psychologists (Fimian and Cross 1986, Schaufeli et al. 2002, Jacobs and Dodd 2003, Noh et al. 2013). According to the researchers, schools also have some demands from students such as being successful or the best and these demands make students feel under pressure (Salmela-Aro et al. 2009). Depending on this, school burnout is treated as a state of tension observed in situations where the student cannot meet the educational expectations of himself/ herself or someone else (Frydenberg and Lewis 2004, Salmela-Aro et al. 2009, Barnett and Flores 2016). It has been seen that the results of studies on school burnout are similar to employee burnout (Pines et al. 1981). Some of these results are depression, absenteeism, and dropping out of school (Fimian and Cross 1986, Covington 2000, Frydenberg and Lewis 2004, Yang 2004, Salmela-Aro et al. 2009). Therefore, it is important to examine the causes and consequences of school burnout (Parker and Salmela-Aro 2011).

It is stated that school burnout has negative consequences and risk factors related to physical and mental health. In particular, the negative school environment and low academic achievement are associated with school burnout (Salmela-Aro et al. 2008). Studies conducted similarly have shown that especially weak relationships within the family and emotion-focused coping increases the risk of school burnout and which in turn lead to anxiety and school dropout later on (Silvar 2001). School burnout often emerges due to a mismatch between the performance standards that the student sets for himself or herself and the actual performance he or she shows at school (Kiuru et al. 2008). For this reason, it is stated that the difference between the situation they expect to be and the one that they are actually in or where they are carries the risk leading to school burnout (Walburg et al. 2016).

Burnout is often described as a three-dimensional structure in the literature. These dimensions include emotional exhaustion, depersonalization, and lack of personal accomplishment or sense of low personal success (Maslach et al. 2001). Exhaustion from these dimensions leads to the feelings of chronic fatigue and uneasiness. Depersonalization is a person's losing his or her interest in the work that he or she is doing and finding it meaningless. The decline in the feeling of personal accomplishment or inability dimension is expressed as a decreased sense of competence and success. For this reason,

burnout is seen as a major risk factor for many professions and students and it is stated that the burnout is likely to result in depression in the long term. Along with depression, school burnout also brings along low self-esteem and suicidal risk (Wallburg 2014).

School burnout is regarded as a form of reaction emerging in dealing with the academic stress that especially experienced by students in the long-term school life. In this context, it is accepted that there is also a three-dimensional structure in school burnout as it is in employee burnout. These dimensions are exhaustion at school, cynicism to the meaning of the school and sense of inadequacy at school (Luo et al. 2016). This situation which is observed in the students leads to some negative results in a developmental sense. Especially school burnout is a feature related to low academic achievement, anxiety, depression, psychological problems, truancy, absenteeism and school dropout (Yang 2004, Bask and Salmela-Aro 2013).

School burnout is associated with school and is being studied as a long-term stress. The studies report that about 10% of adolescents are faced with problems due to school burnout in Finland. Along with that, it is stated that especially the students with success orientation have more school burnout than the students with mastering orientation (Salmela-Aro et al. 2009).

It is stated that high school students who have academic field education have higher levels of school burnout than those who are educated in vocational high schools. This is linked to the test stress of the higher test scores especially required in transition to academic high school. It is also stated that male students who are getting an education in these high schools have more school burnout than girls (Salmela-Aro et al. 2008).

## **Burnout Theories**

The adventure of the concept of burnout, which started out with working life in the beginning, has been extended to studies with university students and then studies conducted to secondary and high school students. In this process, the theories that explained the burnout of working in the beginning then clarified the concept of school burnout. These theories are Conservation of Resources Theory, Demands-Resources Model, Social Cognitive Theory, Existential Perspective and Developmental Process Model.

### ***Conservation of Resources CoR Theory***

The theory of conservation of resources initially introduced some explanations regarding stress and therefore it is among the theories explaining stress. According to this theory, people want to acquire resources and maintain these resources. Stress is a reaction shown to the loss of a possible resource in the environment, especially the loss that may happen in the resources of the person. These resources include objects, conditions, personal characteristics and energies (Grandey and Cropanzano 1999).

Under which conditions stress emerges is one of the topics that the theory explains. According to the theory, people have a basic motivation to acquire, maintain and protect what they value. These things can be expressed as resources. The theory of the conservation of resources mentions the existence of four main resource categories. These resources are can be listed as (i) objects (such as house, car), (ii) conditions (such as good marriage, regular job), (iii) personal qualities (social self-confidence, high self-

esteem) and (iv) energy (loans, money, and supports). According to the theory, psychological stress or tension in people emerges when; (i) the resources are threatened, (ii) the resources are lost and (iii) the owned resources are lost and failure occurs in the acquisition of the new resources (Hobfoll 1989). In this context, burnout is likely to occur when resources are threatened, lost, or a problem is encountered in acquiring new resources.

This theory also explains the intraroles or interroles results of stress. For example, one's role conflict in business life causes him or her to believe he or she cannot succeed at work. Consequently, this person faces the fear of losing his or her job and transfers the other resources he or she has in order to cope with this fear. According to this theory, the conflicts between the roles also lead to the stress. It is because the working life and the roles in the family are not easy to manage together. This situation or potential for losing resources lead to a negative psychological consequence. Consequently, they experience problems such as dissatisfaction, depression, anxiety, or psychological problems. Planning such as leaving the position at the workplace requires relocation or protection of resources. In case it is not done, this situation may result in burnout (Wright and Cropanzano 1998, Hobfoll and Shirom 2001).

This theory also indicates that besides the risk of losing resources, critical life events can also cause stress. In particular, an event that results in the loss of one of the resources predict the emergence of stress and difficulties in people. According to Hobfoll (1989), the changes do not lead to stress in people on their own. However, a change that results in loss of one of the valuable resources is likely to lead to a problematic situation. Based on this, it can be said that the theory of conservation of resources is a theory that also examines the effect of life changes on the stress level.

When the conservation theory of resources is compared with the gains, it states that people are more affected by losses. Even if the resources are sufficient, the loss of resources has effect at a certain rate. In other words, the loss of resources makes people more vulnerable to possible future resource losses (Vaux and Harrison, 1985).

In theory, it is stated that social support is a great resource potential for the individuals who have this directly. Social support has the feature of meta construct which includes the person's connections with people next to him or her, people who can provide help that may be meaningful to the person and a sincere attitude presented with a supportive intent (Vaux and Harrison 1985, Hobfoll and Stokes 1988). Social support means a feeling of being connected with others or access to persons who may be a resource of assistance in necessary conditions. Social support can result in access to an object, condition, personal characteristic, or energy resources. For example, the people with more social support resources can find someone they can borrow from to have something they want, they can find help to succeed when they encounter a new situation or this support they get from their environment may support their self-esteem. The concept of social support in the conservation theory of resources is approached as an important resource (Hobfoll and Shirom 2001).

In the literature, there are empirical studies supporting the explanations of the conservation of resources theory. The one-dimensional approach of the theory to burnout is supported by many longitudinal studies. According to this, burnout occurs due to the chronic stress exposure that arises as a result of work in the working life of individuals (Hobfoll and Shirom 2001). In a meta-analysis study conducted by Lee and Asforth

(1996), the relationship of demand and resources with the three dimensions of burnout has been examined. It has been seen that in accordance with the opinions contained in the conservation theory of resources there are strong relationships between demands & resources and emotional exhaustion compared to depersonalization and lack of personal accomplishment. Again in the same study emotional exhaustion was found to present a stronger relationship with the resources than the demands. It can be interpreted that people are more sensitive to resource loss.

Compared to the burnout individuals, those dedicated to their works are creating more resources in their working life and daily life, they invest more in social support resources and thus increase their positive emotions. This resource abundance serves as the resource for the development of effective coping with problems in people. The concept of engagement is a satisfaction state defined by dedication and vigor in working life. Vigor is explained as an abundance of energy such as mental indomitableness and persistence despite difficulties (insistence) (Schaufeli et al. 2002, Schaufeli and Bakker 2004). Also, vigor is a positive emotional state that creates resources and spreads them between thought and action. Created and disseminated actions also facilitate the state of being dedicated (Schaufeli et al. 2002). Dedication is another part of the commitment. This is exemplified by the feeling of being important, willingness, striving, praising oneself, and passion (Schaufeli et al. 2002). Resources help to develop being dedicated. This is because dedicated individuals have enough resources to complete their tasks.

Along with the conservation of resources theory, which explains stress and burnout in the workplace, there are also studies in which this theory is adapted to school burnout. Regarding this, it is stated that the students who are studying in the health field leave their education after the high school due to school burnout (Deary et al. 2003). In terms of the conservation of resources, school engagement is considered as a protective factor for the risk of dropout from school (Salanova, et al. 2010). By definition, the phenomenon of school burnout can be explained by these two main concepts as social support and the burden of the responsibilities caused by studies at school. In other words, responsibilities in school refer to the risks of acquiring and losing resources while social support refers to protecting resources (Yang, 2004).

There are many studies available in the literature made for employee burnout on the basis of conservation theory of resources. However, a limited number of studies have been conducted on school and student burnout. One of these is the research conducted on 454 university students by Alarcon et al. (2011). In this study, the case of school burnout has been studied and reviewed in terms of conservation of resources. In the study, social support, coping and consciousness personality trait in the big five-personality theory have been taken as resources. Relationships between these resources, school demands, and school burnout were studied with structural equation modeling. There was no direct relationship between social support and the demands in the study, however, it has been seen that there is a direct relationship between social support and problem-focused coping. In the relationship between school burnout and engagement, it is seen that the coping is partly mediating variable. Along with that, it has been seen that there are significant relationships between demands and school burnout and the personality trait of consciousness is associated with the school burnout through demands. It has been seen that there is a high relation in a negative direction between

school burnout and being dedicated.

### ***Demands-Resources Model***

Demand-resources model initially introduced some explanations for stress. However, it later turned to explaining the causes of more burnout. In this context, firstly the demands on the employees at the workplace and then the effects of available resources on burnout and engagement to cope with these demands were studied. The model draws attention to the fact that each profession has its own characteristics in relation to burnout and rather it suggests that these characteristics can be addressed in two general categories as demands and resources (Bakker et al. 2004).

Demands express the needs of the work in terms of physical, social and organizational aspects. There is a psychological cost (such as burnout) of these requirements because they require a constant effort and creates a pressure on the person (Wei et al. 2015). According to Hockey's (1993) demand-control model, people use a performance protective strategy against the environmental stress resources (such as noise, temperature, workload and time pressure). These resources of stress correspond to works demands in the model of demands-resources. Performance protection is accomplished successfully by activation of the sympathetic system (such as autonomic and endocrine systems), an increase of personal effort (active control in the information processing process) or both of them (Hockey 1993). The more people move, or the more effort they make, the more physiological costs they bear. If a person performs such a high-cost behavior for a long time, he or she runs out of energy and gets emotionally exhausted (Demerouti et al. 2001).

Although theories explaining the development of burnout explain the relationship between burnout and job demands, the relations between resources and breaking away from work are explained by the theories about the development and continuity of health (Antonovsky 1987). The basic question of these theories is to determine the factors that protect people's health under the work overload. The answer to this problem is the "resources" that are called health protective factors. Work resources are the physical, psychological, social and organizational aspects of work listed as (i) ability to fulfill the purposes of the job functionally, (ii) reducing the demands of work that leads to physiological and psychological costs and (iii) promoting personal growth and development (Demerouti et al. 2001).

The demands-resources model states that environmental properties can be addressed in two categories as requests and resources. Demands are workload, time pressure, relations with clients, physical environment, and shift work. The resources are feedback, awards, job control, participation, job security and principal support. Excess demands can lead to burnout in people, and lack of resources can lead to breaking away from the work. When the exact opposite is considered, in cases where there is less demand and the resources are sufficient, work engagement and job satisfaction increase in people (Demerouti et al. 2001). Studies in the literature support the model by showing the positive effect of the resources at work on the demands that cause work commitment, performance, and burnout (Bakker and Demerouti 2007, 2008). Personal resources, such as self-efficacy, are also referred to as person-environment interaction and this concept has been included in the model in recent researches. In this context, the studies conducted explain that the resources at work are transformed into work

commitment with personal resources such as self-efficacy (Xanthopoulou et al. 2009).

It is explained by this model that social support affects depersonalization from the dimensions of burnout. Lack of social support, especially in the workplace (Leiter and Maslach 1988, Leiter 1991), restriction of the use of skills (Leiter 1990), low level job control (De Jonge and Schaufeli 1998, De Rijk et al. 1998) and low level of feedback on performance (Maslach and Jackson 1986) are reasons leading to depersonalization. In particular, attention is paid to the importance of social support in the model. It is stated that received social support and feedback are important variables in reducing the negative effect of demands and stress (Cohen and Wills 1985, Bakker et al. 2004).

In summary, this model explains that burnout develops in a two-stage process. In the first stage, job demands create an excessive burden on people and this leads to emotional exhaustion. Inadequate resources in the second stage or resource inefficacy make people confront with job demands and this leads to a complex situation. Then people show withdrawal behaviors. The long-term consequence of withdrawal behavior results in disengagement. Therefore, this model especially argues that the interaction between job demands and internal resources have an effect on the burnout (Demerouti et al. 2001).

It is emphasized that there is a limited knowledge of how to apply theoretical information in the model of demands-resources to the school context in the literature. According to this model, students are faced with too much demand in the academic environment about the lessons and studies that will affect burnout and engagement to the school in the future (Wei et al. 2015). Such situations affect students' engagements level to the school, their burnout level, and their well-being. For this reason, the importance of study and evaluation of the opinions, which were put forward in the model, also in the context of the school is being mentioned. When this model is adapted to schools, demands are regarded as a situation that has the function of fulfilling the purposes regarding lessons and activities; resources are regarded as a situation with the function of realizing the objectives associated with the study. Additionally, as is in the application of the demand-resource model in the working life, self-efficacy beliefs have also been added to school burnout studies. In the model, it has been proposed that demands lead to school burnout in students but self-efficacy beliefs have an important role in improving students' engagement to the school (Salmela-Aro and Upadaya 2014).

The researchers who try to study and explain the concept of school and student burnout within the frame of this model have noted that the demands related to the work required from students lead to stress in students. However, they emphasize that self-efficacy should be considered as a source for enabling and sustainability of engagement (Vasalampi et al. 2010). In particular, it is explained that work-related resources are associated with school engagement whereas demand is more often associated with school burnout. Based on this, it is foreseen that extreme demands increase school burnout and personal resources have an influence on being engaged to school. In addition, it is stated that the concepts school engagement and school burnout can be thought of as two opposite concepts (Salmela-Aro and Upadaya 2014).

The demand-resource model predicts two different processes in burnout and school burnout (Demerouti et al. 2001, Salmela-Aro 2014). One of these is overload and fatigue caused by effort-focused energy process and work demands. This situation can

be defined as “demands”. For example, workload and academic pressure lead to energy depletion and stress in the first stage and then result in burnout. At the end of this process, the person's mental health gets impaired. Another process proposed in the model is a motivational process and “resources” that the student can access resulting in being dedicated to the school. This process ultimately contributes to an increase in life satisfaction of the student. High self-efficacy, social support, support for engagement are listed as examples of resources. In addition to that, demands are work-related difficulties during school years, overwork and prevention of engagement (Salmela-Aro and Upadyaya 2014). While the study-related resources are more decisive in students' developing engagement to school, work-related demands are more evident in the occurrence of school burnout. Study demands are a challenge for study-related purposes. However, resources have an important role in achieving these goals. Consequently, as a result of school burnout, situations such as depression and school dropout are being observed, being dedicated to school improves students' doing well and learning (Salmela-Aro 2017).

In a study by Salmela-Aro and Upadyaya (2014), it has been concluded that year-end study demands presented a positive relationship with school burnout in vocational high school students whereas the study sources are positively related to the engagement to school. In addition, it has been seen in the study that self-efficacy beliefs have a positive correlation with engagement to education and a negative relationship with school burnout. In a study conducted by Salmela-Aro et al. (2008), school burnout has been found to be a strong predictor of depression again in vocational high school students. In addition, the predictive power of school burnout has also been examined and it has also been seen that depression also predicts school burnout. However, it has been seen that school burnout has higher predictive power in depression. In addition, research has reached the conclusion that life satisfaction is a predictor of school engagement. These findings obtained in the research have been interpreted as school burnout has “spillover effect” in other areas of life whereas other areas of life have a positive effect on the school.

In a recent research conducted in the cross-lagged pattern by Salmela-Aro et al. (2017), it has been seen that school burnout predicts internet addiction; it has been seen that in the next stage internet addiction predicts school burnout and in the last stage both school burnout and internet addiction predict depression. This situation is interpreted as internet addiction affects school-related mental health negatively in adolescents and it has a negative effect on the general mental health with the spillover effect in the last stage. In this context, researchers indicate that the demand-resource model is a useful model for explaining students' levels of adjustment to school and general adjustment. Especially in the school context, it is mentioned that burnout has a mediator effect on demands and mental health (Salmela-Aro 2017).

### ***Social Cognitive Theory***

Self-efficacy is one of the most central concepts in social cognitive theory (Bandura 1997). Self-efficacy expectation in social cognitive theory is the most basic determinant about what behavior will be the initiator for an action to take place, how much effort will be made and how long it will take if failure or obstruction is encountered (Schwarzer and Hallum 2008). In a more concrete sense, self-efficacy includes the beliefs whet-



her a person can or cannot complete the task in a particular task (Yang 2004). According to the theory, self-efficacy makes a difference in how one thinks, feels, and acts. In terms of feelings, it is stated that low self-efficacy may lead to depression, anxiety, and hopelessness. It is stated that those with low self-efficacy have low self-esteem and they also have a pessimistic view of their success and personal development. A strong sense of competence in terms of thought facilitates performance and cognitive processes in different environments. This situation also determines the quality of decision-making and academic achievement (Schwarzer and Hallum 2008). Also, individuals with low self-efficacy have doubts about their competence in overcoming an uncertain situation and they give up easily (Yang 2004).

The social cognitive theory is one of the widespread theories regarding views on explaining human behavior (Bandura 1977, 1982). In literature, based on the views expressed in social cognitive theory, the case of burnout in the working life has been researched and studies have been made on this subject (Schwarzer and Greenglass 1999). Similarly, the concepts and views expressed by this theory are also used in the case of school burnout. Self-efficacy, one of the most important concepts of the theory, is evaluated as a feature associated with burnout and school burnout (Yang 2004). The self-efficacy beliefs, the demands explaining school burnout are also addressed to in resources model and self-efficacy is considered as a personal resource in dealing with burnout (Xanthopoulou et al. 2009). In addition, it is reported that there is a positive relationship between engagement to the school, which is an exact opposite of school burnout, and self-efficacy (Salmela-Aro and Upadyaya 2014).

More than thirty years, the researchers have been using the concept of self-efficacy to explain the phenomenon of burnout (Yang 2004). In order to explain the concept of self-efficacy, Albert Bandura suggested the views expressed by social cognitive theory. According to Bandura, self-efficacy is the ability of a person to create an action plan in order to be able to perform in a certain matter and to evaluate the skills related to this task. As is known, self-efficacy is a powerful predictor of performance in a given task and is the degree to which one perceives his or her talents in a particular task. Self-efficacy expectation is one of the determinants of what task or activity the person will choose. With a more specific expression, people with higher self-efficacy beliefs tend to more challenging tasks. On the contrary, people with weak self-efficacy beliefs prefer tasks below their talent (Bandura 1977).

Self-efficacy level increases or decreases motivation. Individuals with high self-efficacy prefer challenging task (Bandura 1997). They determine higher goals for themselves and are devoted to these goals. Actions of people are formed by their thoughts and based on this people predict future scenarios that are optimistic or pessimistic about themselves according to their self-efficacy. When a step is to be taken in a matter, those with high self-efficacy are making more efforts in a task compared to those with low self-efficacy and show more persistence. When they meet an obstacle, they are recovering faster and are reconnecting to their purposes. High self-efficacy allow people to choose more challenging tasks at the same time, discover their surroundings and create innovations. Some people have doubts about themselves and cannot motivate themselves. These people have weak faith in themselves to accomplish their goals. In addition, these people do not know what steps to take in order to be successful. In this sense, self-efficacy belief differs in three respects from self-esteem, self-concept, audit focus

and other similar characteristics. (i) self-efficacy is an inner attitude (I am the reason for the behavior I display), (ii) it is a source for future behavior and (iii) the desired behavior is closely related to cognition and is a good predictor of correct behavior. For this reason, self-efficacy has a functioning structure (Schwarzer and Hallum 2008).

High self-efficacy provides comfort to individuals when they are engaged in a difficult task or activity. On the contrary, low self-efficacy causes the task that people are doing to seem harder than it actually is. This leads to a more limited perspective on stress, depression, and problem-solving (Yang 2004). Self-efficacy shows a protective characteristic when it comes to dealing with difficulties. The optimistic view of a person's ability to cope with daily difficulties increases motivation in coping and offers a more structured way. Therefore, those with high levels of self-efficacy are more likely to meet both the demands of their work and the demands of everyday life than those who doubt themselves. Individuals who are well-suited to such demands will be more resistant to burnout (Schwarzer and Greenglass 1999, Caprara et al. 2003, Skaalvik and Skaalvik 2007).

In the most general sense, it is emphasized that self-efficacy influences one's goals, emotional reactions, effort, coping behaviors and persistence in a task (Yang 2004). Researchers have revealed the relationship between some psychological states and burnout. One of these features is self-efficacy. In these studies, it has been stated that individuals who do not have a sense of mastery, in other words, those with low self-efficacy beliefs, experience easier burnout and their adaptation capacities are weaker (Cherniss 1992). Based on these views, it can be said that the higher the level of self-efficacy in people, the lower the rate of burnout. Internal variables such as self-efficacy level are associated with burnout in almost all occupations (Maslach and Jackson 1985).

The social cognitive theory states that self-efficacy, as well as burnout, affects students' perceptions of performance on a specific task. Based on this theory, social support and the workload of lessons are two important factors affecting burnout (Yang 2004). The studies in the literature reveal the relationship between self-efficacy belief and getting high grades from lessons in high school (Caprara et al. 2010). For this reason, it is stated that self-efficacy can contribute positively to students' ability to cope with stress. In addition, it has been reported that the solution-focused therapy approach in adolescents is effective in increasing self-efficacy. Especially in terms of dealing with school burnout, it is recommended to carry out studies enhancing self-efficacy and solution-focused coping and the attention should be drawn to the relationship between self-efficacy and school burnout (Walburg 2014).

### ***Existential Perspective***

Burnout is treated as a type of stress or as a result of stress when the concept was first introduced. However, Pines (2000) suggests that there is a large number of anecdotal evidence that burnout is not a result of high level of stress. He states that from time to time stress in the workplace reflects the importance of the work that one is doing and may, therefore, be associated with a low level of burnout. In this regard, he cites a health worker's following statement: "On my busiest days, I enjoy work more than other days. Burnout occurs when I cannot help a patient." Based on this, he states that burnout may be a subspecies of stress and there may be different variables in terms of increasing burnout, being associated with burnout and the results it will cause. Along

with that, more emphasis on the organizational factors in relation to burnout in the studies dealing with teacher burnout especially in the field of education constitutes an opinion that burnout is affected by organizational variables according to the individual variables (Pines and Aronson 1988, Maslach and Leiter 1997). However, it is stated that the best predictors of burnout are not organizational variables but rather individual variables (Kremer-Hayon and Kurtz 1985).

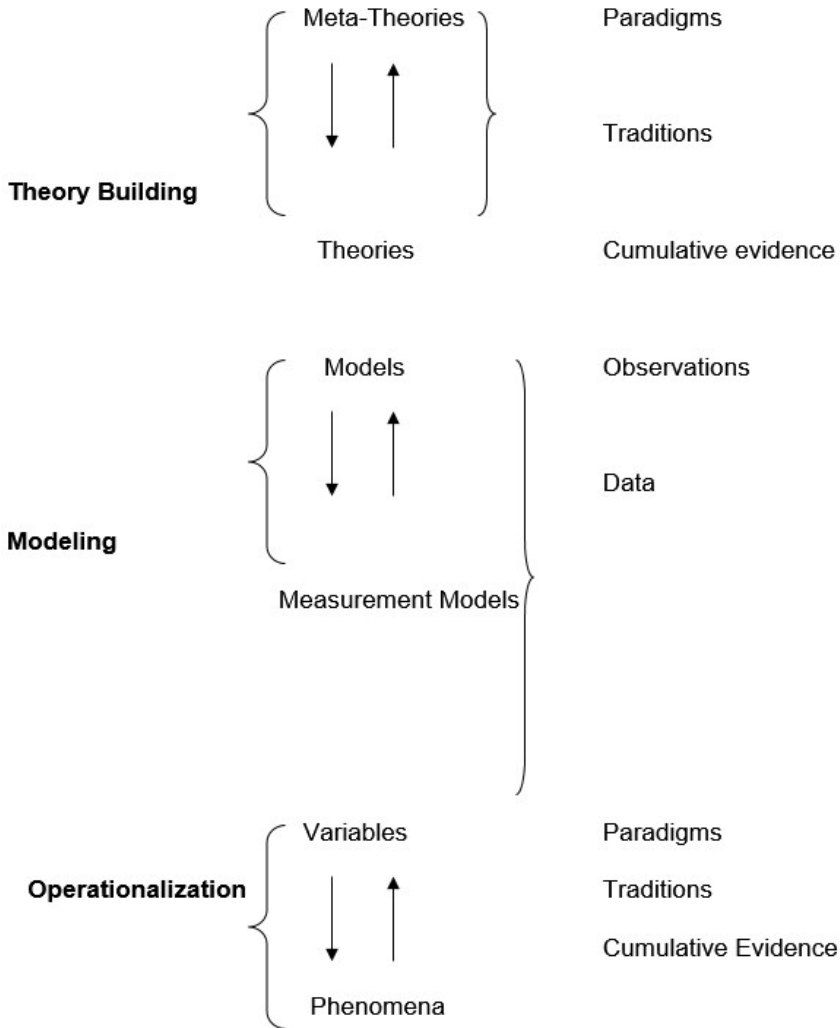
From an existential point of view, the real reason for your burnout is that people do not find their lives and jobs meaningful and functional (Clarkson 1992, Pines 1993, Yiu-kee and Tang 1995, Manzano-Garcia and Ayala-Calvo 2013). Similarly, burnout directly affects people's values and hopes. This causes people to question both their profession and their existence (Maslach and Leiter 1997). According to Frankl (2013), the search for meaning in human life is the primary instinct in life. In addition, when people find the work they do meaningful, this offers a way to deal with the fear of confronting death. A person, who expects to get the feeling of importance from his or her work from an existential point of view, starts out with high goals and expectations; he or she becomes an idealist and more motivated about work. However, if the person feels that he or she is unsuccessful, then the job becomes unimportant. The person starts to feel that he or she will not be able to make a difference in the world, starts to experience hopelessness and despair and finally the feeling of burnout (Pines and Keinan, 2005). There are studies revealing this situation. In his study, Pines (2000, 2002) has revealed that there is a negative relation between feeling important and burnout. Although the correlational studies have not revealed any information regarding the causality among variables, one of the possible consequences of the burnout is finding work is insignificant. In addition, it can be argued that burnout and feeling of insignificance are the results of a more general stress factor (Pines and Keinan 2005).

The existentialist viewpoint states that teacher burnout is related to high-level needs including the need to achieve and devoting all the potential to the job and a sense of self-fulfillment (Malanowski and Wood 1984). Dealing with problematic behaviors of students too much, decrease in students' learning and lack of student participation in lessons in schools cause the teachers to feel the sense of worthlessness. This leads to teacher burnout in the last stage (Pines 2002).

From the existentialist point of view summarized above, the phenomenon of burnout is more often observed as a result of the loss of meaning in life. Besides that when a person finds the job he or she does worthless, meaningless, and thinks that he or she does not make a difference in the world he or she experiences the feeling of burnout. Based on this, school and student burnout concept can be considered as a situation associated with meaning in life and whether the activities carried out at school are deemed valuable by the student.

### ***Developmental Process Model***

According to Nurmi (2012), modeling in psychology is how the facts and theoretical concepts on the basis of work or their direct and indirect relations with each other are observed and how they can be generalized. It is stated that these interactive processes consist of three levels and each level consists of two sub-levels within itself: Theory building (meta-theories and theories), modeling (models and measurement models) and measurability (variables and phenomena).



**Figure 1. Interaction between different levels of modeling** (Nurmi 2013)

As is also shown in Figure 1, first of all, meta-theories are made of at the most general and concrete level (such as learning theories or psychoanalysis), and general principles of specific research areas. However, these theories influence the construction of more specific theories that cannot be misunderstood by individual studies or experiments. In the next stage, theories come to a more concrete and more articulated level (For example, learned helplessness theory). However, these theories, as in meta-theories, can rarely be falsified by only one study. One of the key thoughts presented in Figure 1 is the different levels of theoretical conceptualizations interact with each other.

In the long run, the development of new theories and the change of paradigms in a particular research area can affect meta-theories. Similarly, theories often derive from some key principles of meta-theories (Nurmi 2013).

It is defined as second level modeling in the modeling process. At this level, there are two sub-levels. One of these is the "models" typically detailed, concrete, testable, and empirical and derived from other theories that can be falsified. The other sub-level of the modeling is the testing of the measurement models. Theories typically include some key structures and these structures provide the basis for creating measurement models. Testing of measurement models includes whether certain theoretical constructs will be tested in valid and reliable ways (Nurmi 2013).

The third part of modeling is to "operationalization" key structures to create measuring models based on variables. There are some typical assumptions about how to measure phenomena and key variables in interest areas of different theories in an appropriate way. Variables are various observations of the subject concerned (Nurmi 2013).

Each level of modeling serves different functions of science. Meta-theories typically provide a means for understanding the overall research area. For example, the principles of learning theory, as well as the understanding of learning, are used in many areas of psychology from child development to the development of psychiatric disorders. Theories are typically used as a tool for understanding observations in studies and direct empirical studies. When theories are not useful, the development of new theories is also restricted. Thus, models are used to test broader theories by making use of data obtained from concrete studies. Models may be falsified and if the models are derived from false theories, they lead to the reformulation of these theories. The key role of making it measurable is to ensure that observations are valid and reliable by testing variables and measurement models (Nurmi 2012).

The studies conducted on burnout in working life has contributed to the progression of theories that studied burnout. The first studies based on this theoretical view were conducted by Maslach et al. (2001). However, such studies are mostly cross-sectional studies. In literature, especially cross-sectional research designs are insufficient to explain the developmental processes of psychological features. In this context, cross-sectional studies are limited in explaining the causal relationship between burnout and related factors. Therefore, it is suggested that longitudinal studies to explain the developmental processes of various psychological traits are conducted (Tang et al. 2016). As stated in the modeling process, it may be easier to understand what kind of process school burnout is following in developmental sense through studies conducted in the longitudinal pattern by making use of structural equation modeling.

Similar to the burnout phenomenon in working life, school burnout was studied as a one-dimensional structure in the beginning. However, later just like the views on the burnout concept of Maslach, Schaufeli and Leiter, emotional exhaustion, depersonalization and lack of personal accomplishment have been studied as a three-dimensional structure (2001) (Salmela-Aro et al. 2009). Although this situation provides an advantage in explaining and explaining the well-being of students, it is stated that the causality relations between dimensions are not revealed. It is emphasized that revealing the causality between dimensions is beneficial in terms of developmental processes (Parker and Salmela-Aro 2011).

There are studies aiming to reveal the developmental direction of burnout in the li-

terature. In a study conducted by Golembiewski (1989), it has been seen that burnout predicts well-being and success by presenting a model in this direction (Schaufeli and Enzmann 1998). In this model, it has been suggested that burnout occurs gradually, ends in eight separate clusters and is a progressive situation that disturbs harmony (Golembiewski et al. 1983, Golembiewski et al. 1993). According to this progressive model in the first stage, depersonalization develops and this is followed by feelings of lack of personal accomplishment and emotional exhaustion (Golembiewski 1989, Taris et al. 2005).

In the model suggested by Leiter (1989, Leiter and Maslach 1998), more research findings were presented compared to the model proposed by Golembiewski (Lee and Ashforth 1993, Schaufeli and Enzmann 1998, Taris et al. 2005). This model emphasizes that emotional exhaustion is the first component of burnout, that depersonalization develops as an ineffective coping method and then the feeling of lack of personal accomplishment is formed (Leiter 1989). Especially studies carried out in working life generally support the relation between emotional exhaustion and depersonalization. However, the lack of sufficient studies explaining the relationship between feelings of depersonalization and personal accomplishment led to the emergence of alternative models for testing this distinction (Maslach et al. 2001). In this context, Lee and Ashforth (1993) supported the model of burnout, which Leiter had presented (that emotional exhaustion predicts both depersonalization and lack of personal accomplishment), with longitudinal research. Finally, the most widespread research in the context of developmental models has been carried out by Taris et al. (2005). In this research, the models presented by Lee and Ashforth (1993) and Leiter (1989) were combined. Consequently, it was seen that emotional exhaustion predicted the feeling of personal accomplishment directly and indirectly through depersonalization (Taris et al. 2005).

There are studies aiming to reveal developmental process model in employee burnout as well as studies based on the developmental process model of school burnout. In this direction, aimed at explaining how school burnout develops in students and the course it follows longitudinal researches are being conducted and the results obtained from these studies are discussed in the literature. Parker and Salmela-Aro (2011) collected data for four times with an interval of nine months from 852 high school students, whose age average was 16, in Finland. In this study, in which longitudinal pattern was used, longitudinal panel models were used in the analysis of the data. In the study, it has been seen that exhaustion causes feelings of cynicism and sense of inadequacy. In a similar study conducted by Noh et al. (2013) in Korea, the study started with 405 participants who still continued high school and whose age average was 13. This was three-stage study and analyzes were performed with data from 358 students that participated in all three stages and received \$ 5 for each survey participated. It was also seen in this research that emotional exhaustion predicted cynicism and academic inadequacy.

The transition between early and late adolescence periods exists in various cultures and contexts. In this period, due to adolescence period, changes are observed in persons' cognitive development, school transitions, peer and family roles. These changes often occur in adolescents' development trajectories. While the changes that take place during this period express the development and adaptation for some adolescents, for others they may have the feature that distorts adaptation (Gutman and Eccles 2007). Accord-

ding to Stage-environment fit (perspective), it is stated that an adolescent, whose environment changes in a regressive way from developmental sense, may encounter with more difficulties. On the other hand, it is stated that in case the social environment meets the developmental needs of the adolescent, more positive results will be observed in adolescents. This situation is also called stage-environment compatibility of person. This perspective on the general level emphasizes the compatibility of the needs of adolescents moving up to high school from secondary school with the facilities and opportunities that a traditional high school environment provides. In this sense, a low adjustment leads to a decrease in the motivation of the adolescents in transition from secondary school to high school (Eccles et al. 1993).

In addition to examining the causal relationship between the dimensions of school burnout, developmental changes in school burnout and what kind of change school burnout exhibits in educational transitions have been studied. For example, it is stated that there is a decline in the emotional engagement of adolescents, who continue high school in Finland, to school during the period from the 9th grade until the 11th grade (Wang et al. 2015). On the other hand, it is stated that school burnout decreases in the students who make a transition to vocational high schools (Salmela-Aro and Tynkkyinen 2012). This situation is linked to the fact that Finnish general high school students feel more exhausted and worried during the time they spend at school because they find less pleasant and valuable. Consequently, the rate of dropout in high school students experiencing school burnout is four times higher than the other students (Bask and Salmela-Aro 2013). At this stage, the importance of the attitude of cynicism towards school is mentioned. This leads to cynicism attitudes towards the society and institutions as well as leading to a reduction in the meaning that a person attaches to school in general (Salmela-Aro 2017).

## Conclusion

The Conservation of Resources (CoR) Theory emphasizes that social support protects the individual from stress and burnout especially when the demands are intense. In particular, the abundance of social support resources presents more appropriate ways of coping with stressful situations and burnout. In addition to this, it is also stated that social support has a role not only in providing an emotional catharsis but also in suggesting alternative ways in stressful situations. Among the resources, social support is listed as well as a personality trait of consciousness. It is stated that highly consciousness persons adopt a problem-focused coping strategy rather than an emotion-focused coping strategy in stressful situations or with school burnout and that they cope more effectively with stressful situations. It is stated that this situation is similar with the explanations emphasized in the Demands-Resources Model. It is because those who prefer emotion-focused coping more than problem-focused coping perceive the demands of school or work more intensely (Alarcon et al. 2011). One of the similarities between the two theories is the emphasis on the importance of claims in intensely stressful situations. In other words, in stressful situations, if the resources are limited, the demands seem more for the person (Hobfoll 1989). Based on these explanations, both in the Conservation of Resources as well as in the Demands-Resources Model, it can be said that social support resources are seen to be important in dealing with stressful situations. In addition, both theories draw attention to the fact that it leads to bur-

nout or stress if the demands of the job or school are more than the resources of the individual.

When explanations of Social Cognitive Theory about school burnout is considered, it can be said that the theory emphasizes the concept of self-efficacy, which is a more internal resource. The belief that a person has about completing or overcoming a task reflects the content of the self-efficacy concept (Yang 2004). The emphasis on this inner feature in Social Cognitive Theory exists likewise in the Demands-Resources Model. In this respect, there is an overlapping quality of the two theories. In the Demands-Resources Model, it is stated that personality traits facilitate problem-solving and that problem solving also has a role in coping with school burnout (Alarcon et al. 2011). When self-efficacy beliefs are considered as a feature that contributes positively to the problem-solving processes of the people, it is possible to say that these two concepts are related to school burnout. Based on this, it can be said that there are common characteristics between the Demand-Resource Model and the Social Cognitive Theory.

In terms of the emphasis on understanding meaning in life, it can be said that Existentialist Perspective differs from the Conservation of Resources Theory and the Demand-Resources Model. Not finding the work doe meaningful, not finding school and school activities meaningful is important in terms of school burnout. Unlike other theories, it can be said that this theory gives more weight to the explanations at the individual level of school burnout. Especially when Frankl's (2013) views on happiness in the sense of life are taken into consideration, it can be said that a student's finding school activities, lessons and the school itself meaningful is related with a low level of school burnout (Pines and Keinan 2005). Based on this, it can be said that descriptions of Existential Perspective regarding school burnout are based on a philosophical basis and mostly at the individual level. However, on the basis of this theory, it is seen that the number of studies on school burnout is relatively limited in the literature. For this reason, it can be said that there is a need for empirical studies based on existentialist theory.

Developmental Process Model, one of the theories and models covered in the study, provides important information about especially the developmental processes of burnout. This approach attaches importance to modeling studies in school burnout (Nurmi 2012, 2013). On the basis of this model, it is observed that longitudinal studies on school burnout have begun to be made in recent years. Unlike other theories and approaches, this type of longitudinal studies intends to reveal the trajectories of burnout follows according to developmental processes, and the causes of it.

Recently, the concept of burnout has begun to be dealt with in the field of sports as well as in work and school life. This concept is expressed as sports burnout (Sorkkila et al. 2017a; Sorkkila et al. 2017b). Measuring tools have also begun to be developed in this regard (Sorkkila et al. 2017b). In addition, emotion regulation (Seibert et al. 2017) and the relationship between intimate partner violence and school burnout is examined empirically (Cooper et al. 2017). In the field of health, it is possible to see studies that study the connection between school burnout and cardiovascular disorders (May et al. 2018).

As can be understood from the theoretical framework in this study, the concept of burnout negatively affects the adjustment of both employees and students in their daily lives, mental health, and general well-being. Although, in particular, studies dealing



with employee burnout are frequently seen, it can be said that school burnout studies are relatively limited. Although especially in the recent times, studies have been carried out on the basis of the Demands-Resources Model and the Conservation of Resources Theory, the increase in the number of studies based on other theories will make it easier to meet the important needs in the relevant field.

When compared to other theories and interventions, the relatively new Developmental Process Model mostly concentrates on longitudinal research. Longitudinal research provides a rich information about the development and change of a feature over time. For this reason, it brings along a long-term data collection process. Although it is obvious that it is difficult to carry out studies like this, considering the findings it provides, the importance of longitudinal studies draw attention. However, the longitudinal studies on both the employee burnout schools in Turkey have not been found. In the context of a developmental process, in order to understand the course that school burnout follows, longitudinal studies are needed.

Although the concept of school burnout with different variables is studied in Turkey, studies on prevention of school burnout or intervention in school burnout are limited. It is clear that especially for secondary school and high school level intervention-based studies including adolescents are needed. For preventive and protective mental health, it is important that such studies become widespread.

## References

- Alarcon GM, Edwards JM, Menke LE (2011) Student burnout and engagement: a test of the conservation of resources theory. *J Psychol*, 145:211-227.
- Antonovsky A (1987) *Unraveling the Mystery of Health: How People Manage Stress and Stay Well*. San Francisco, CA, Jossey-Bass.
- Bakker AB, Demerouti E (2007) The job demands-resources model: state of the art. *Journal of Managerial Psychology*, 22:309-328.
- Bakker AB, Demerouti E (2008) Towards a model of work engagement. *Career Development International*, 13:209-223.
- Bakker AB, Demerouti E, Verbeke W (2004). Using the job demands - resources model to predict burnout and performance. *HRMAGAZINE*, 43(1):83-104.
- Bandura A (1977) Self-efficacy: Toward a unifying theory of behavioral change. *Psychol Rev*, 84:191-215.
- Bandura A (1982) Self-efficacy mechanism in human agency. *Am Psychol*, 37:122-147.
- Bandura A (1997) *Self-Efficacy: The Exercise of Control*. New York, Freeman.
- Barnett MD, Flores J (2016) Narcissus, exhausted: Self-compassion mediates the relationship between narcissism and school burnout. *Pers Individ Dif*, 97:102-108.
- Bask M, Salmela-Aro K (2013) Burned out to drop out: Exploring the relationship between school burnout and school dropout. *European Journal of Psychology of Education*, 28:511-528.
- Caprara GV, Vecchione M, Alessandri G, Gerbino M, Barbaranelli C (2011) The contribution of personality traits and self - efficacy beliefs to academic achievement: a longitudinal study. *Br J Educ Psychol*, 81:78-96.
- Cherniss C (1992) Long-term consequences of burnout: an exploratory study. *J Organ Behav*, 13(1): 1-11.
- Clarkson P (1992) Burnout: typical racket systems of professional helpers. *Transactional Analysis Journal*, 22:153-158.
- Cohen W, Wills TA (1985) Stress, social support and the buffering hypothesis. *Psychol Bull*, 98:310-357.
- Cooper AN, Seibert GS, May RW, Fitzgerald MC, Fincham FD (2017) School burnout and intimate partner violence: the role of self-control. *J Individ Differ*, 112:18-25.
- Covington M (2000) Goal theory, motivation, and school achievement: an integrative review. *Annu Rev Psychol*, 5:171-200.
- De Jonge J, Schaufeli WB (1998) Job characteristics and employee well-being: a test of Warr's Vitamin Model in health care workers using structural equation modelling. *J Organ Behav*, 19:387-407.
- De Rijk AE, Blanc PML, Schaufeli WB, Jonge J (1998) Active coping and need for control as moderators of the job demand-control model: effects on burnout. *J Occup Organ Psychol*, 71:1-18.
- Deary IJ, Watson R, Hogston R (2003) A longitudinal cohort study of burnout and attrition in nursing students. *J Adv Nurs*, 43:71-

- 81.
- Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB (2001) The job demands-resources model of burnout. *J Appl Psychol*, 86:499-512.
- Eccles JS, Midgley C, Wigfield A, Buchanan CM, Reuman D, Flanagan C et al. (1993) Development during adolescence: the impact of stage-environment fit on young adolescents' experiences in schools and in families. *Am Psychol*, 48:90-101.
- Fimian M, Cross A (1986) Stress and burnout among preadolescent and early adolescent gifted students: a preliminary investigation. *J Early Adolesc*, 6: 247-267.
- Frankl V (2013) *İnsanın Anlam Arayışı* (Çev. S Budak). İstanbul, Okuyan Yayınları.
- Freudenberger HJ (1974) Staff burn-out. *J Soc Issues*, 30:159-165.
- Frydenberg E, Lewis R (2004) Adolescents least able to cope: How do they respond to their stresses? *Br J Guid Counc*, 32:25-37.
- Golembiewski R, Boudreau R, Goto K, Murai T (1993) Transnational perspectives on job burnout: Replication of phase model results among Japanese respondents. *International Journal of Organizational Analysis*, 1:7-27.
- Golembiewski R, Munzenrider R, Carter D (1983) Phases of progressive burnout and their work site covariants: critical issues in OD research and praxis. *J Appl Behav Sci*, 19:461-481.
- Grandey AA, Cropanzano R (1999) The conservation of resources model applied to work-family conflict and strain. *J Vocat Behav*, 54(2): 350-370.
- Gutman LM, Eccles JS (2007) Stage-environment fit during adolescence: trajectories of family relations and adolescent outcomes. *Dev Psychol*, 43:522-537.
- Hobfoll SE (1989) Conservation of resources: a new attempt at conceptualizing stress. *Am Psychol*, 44:513-524.
- Hobfoll SE, Shirom A (2001) Conservation of Resources: Applications to stress and management in the workplace. In *Handbook of Organizational Behavior* (Ed R Golembiewski):57-80. New York, Marcel Dekker.
- Hobfoll SE, Stokes JP (1988) The process and mechanism of social support. In *The Handbook of Research in Personal Relationships* (Ed SW Duck):497-517. London, Wiley.
- Hockey GRJ (1993) Cognitive energetical cognitive mechanisms in the management of work demands and psychological health. In *Attention: Selection, Awareness and Control* (Eds A Baddley and L Weiskrantz):328-345. Oxford, England, Clarendon Press.
- Jacobs SR, Dodd D (2003) Student burnout as a function of personality, social support, and workload. *J Coll Stud Dev*, 44:291-303.
- Kiuru N, Aunola K, Nurmi J, Leskinen E, Salmela-Aro K (2008) Peer group influence and selection in adolescents' school burnout. *Merrill Palmer Q*, 54:23-55.
- Kremer-Hayon L, Kurtz H (1985) The relation of personal and environmental variables to teacher burnout. *Teach Teach Educ*,1:243-249.
- Lee RT, Ashforth BE (1996) A meta-analytic examination of the correlates of the three dimensions of job burnout. *J Appl Psychol*, 81:123-133.
- Leiter M (1989) Conceptual implications of two models of burnout: A response to Golembiewski. *Group and Organizational Studies*, 14:15-22.
- Leiter MP (1990) The impact of family resources, control coping, and skill utilization on the development of burnout: A longitudinal study. *Human Relations*, 43:1067-1083.
- Leiter, MP (1991) Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *J Organ Behav*, 12:123-144.
- Leiter M, Maslach C (1988) The impact of interpersonal environment on burnout and organizational commitment. *J Organ Behav*, 9: 297-308.
- Luo Y, Wang Z, Zhang H, Chen A, Quan S (2016) The effect of perfectionism on school burnout among adolescence: the mediator of self-esteem and coping style. *Pers Individ Dif*, 88:202-208.
- Malanowski JR, Wood PH (1984) Burnout and self-actualization in public school teachers. *J Psychol*, 117:23-26.
- Manzano-García G, Ayala-Calvo JC.(2013) New Perspectives: Towards an integration of the concept "burnout" and its explanatory models. *Annals of Psychology*, 29:800-809.
- Maslach C, Jackson SE (1985) The role of sex and family variables in burnout. *Sex Roles*, 12:837-851.
- Maslach C, Leiter MP (1997) *The Truth about Burnout: How Organizations Cause Personal Stress and What to Do about It?* San Francisco, Jossey Bass.
- Maslach C, Schaufeli W, Leiter P (2001) Job burnout: new directions in research and intervention. *Curr Dir Psychol Sci*, 12:189-192.
- Maslach J, Jackson SE (1986) *Maslach Burnout Inventory*, 2nd edition. Palo Alto, CA, Consulting Psychologists Press.
- May RW, Seibert GS, Sanchez-Gonzalez MA, Fincham FD (2018) School burnout and heart rate variability: risk of cardiovascular disease and hypertension in young adult females. *Stress*, 21:211-216.

- Noh H, Shin H, Lee SM (2013) Developmental process of academic burnout among Korean middle school students. *Learn Individ Differ*, 28:82-89.
- Nurmi JE (2012) Foundational issues in investigating development as interindividual variation. In *Handbook of Developmental Research Methods* (Eds B Laursen, T Little, N Card):231-246. New York, Guilford.
- Nurmi JE (2013) Modeling developmental processes in psychology. *Perspect Sci*, 21:181-195.
- Parker PD, Salmela-Aro K (2011) Developmental processes in school burnout: a comparison of major developmental models. *Learn Individ Differ*, 21:244-248.
- Pines AM (1993) Burnout: an existential perspective. In *Professional burnout* (Eds W Schaufeli, C Maslach, T Marek):33-51. Philadelphia, Taylor & Francis.
- Pines AM (2000) Nurses' burnout: an existential psychodynamic perspective. *J Psychosoc Nurs Ment Health Serv*, 38(2):23-31.
- Pines AM (2002) Teacher burnout: a psychodynamic existential perspective. *Teachers and Teaching: Theory and Practice*, 8:121-140.
- Pines AM, Keinan G (2005) Stress and burnout: the significant difference. *Pers Individ Dif*, 39:625-635.
- Pines A, Aronson E (1988) *Career Burnout: Causes and cures*. New York, Free Press.
- Pines A, Aronson E, Kafry D (1981) *Burnout: From Tedium to Personal Growth*. New York, Free Press.
- Salanova M, Schaufeli WB, Martinez I, Breso E (2010) How obstacles and facilitators predict academic performance: The mediating role of study burnout and engagement. *Anxiety Stress Coping*, 23:53-70.
- Salmela-Aro K (2017) Dark and bright sides of thriving—school burnout and engagement in the Finnish context. *Eur J Dev Psychol*, 14:337-349.
- Salmela-Aro K, Upadaya K (2014) School burnout and engagement in the context of demands—resources model. *Br J Educ Psychol*, 84:137-151.
- Salmela-Aro K, Tynkkynen L (2012) Gendered pathways in school burnout among adolescents. *J Adolesc*, 35:929-939.
- Salmela-Aro K, Kiuru N, Nurmi J (2008) The role of educational track in adolescents' school burnout: a longitudinal study. *Br J Educ Psychol*, 78: 663-689.
- Salmela-Aro K, Kiuru N, Leskinen E, Nurmi J (2009) School Burnout Inventory (SBI): reliability and validity. *Eur J Psychol Assess*, 25:48-57.
- Salmela-Aro K, Savolainen H, Holopainen L (2009) Depressive symptoms and school burnout during adolescence: evidence from two cross-lagged longitudinal studies. *J Youth Adolesc*, 38:1316-1327.
- Salmela-Aro K, Upadaya K, Hakkarainen K, Lonka K, Alho K (2016) The dark side of internet use: two longitudinal studies of excessive internet use, depressive symptoms, school burnout and engagement among Finnish early and late adolescents. *J Youth Adolesc*, 46:343-357.
- Schaufeli W, Enzmann D (1998) *The burnout companion to study and practice: a critical analysis*. London, Taylor & Francis.
- Schaufeli WB, Bakker AB (2004) Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *J Organ Behav*, 25:293-315.
- Schaufeli WB, Martinez IM, Pinto AM, Salanova M, Bakker AB (2002) Burnout and engagement in university students: a cross national study. *J Cross Cult Psychol*, 33:464-481.
- Schaufeli WB, Salanova M, Gonzalez-Roma V, Bakker AB (2002) The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *J Happiness Stud*, 3:71-92.
- Schwarzer R, Greenglass E (1999) Teacher burnout from a social-cognitive perspective: a theoretical position paper. In *Understanding and Preventing Teacher Burnout: A Sourcebook of International Research and Practice* (Eds R Vandenberghe, M Huberman):238-246. Cambridge, Cambridge University Press.
- Schwarzer R, Hallum S (2008) Perceived teacher self - efficacy as a predictor of job stress and burnout: mediation analyses. *Appl Psychol*, 57:152-171.
- Seibert GS, Bauer KN, May RW, Fincham FD (2017) Emotion regulation and academic underperformance: the role of school burnout. *Learn Individ Differ*, 60:1-9.
- Silvar B (2001) The syndrome of burnout, self-image, and anxiety with grammar school students. *Horizons of Psychology*, 10:21-32.
- Skaalvik EM, Skaalvik S (2007) Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *J Educ Psychol*, 99:611-625.
- Sorkkila M, Aunola K, Ryba TV (2017a) A person-oriented approach to sport and school burnout in adolescent student-athletes: The role of individual and parental expectations. *Psychol Sport Exerc*, 28:58-67.
- Sorkkila M, Ryba TV, Aunola K, Selänne H, Salmela-Aro K (2017b) Sport burnout inventory—Dual career form for student-athletes: Assessing validity and reliability in a Finnish sample of adolescent athletes. *J Sport Health Sci*, doi:

- 10.1016/j.jshs.2017.10.006.
- Tang FC, Li RH, Huang SL (2016) The association between job-related psychosocial factors and prolonged fatigue among industrial employees in Taiwan. *PloS One*, 11:e0150429.
- Taris T, Le Blanc P, Schaufeli W, Schreurs P (2005) Are there causal relationships between the dimensions of the Maslach Burnout Inventory? a review and two longitudinal tests. *Work Stress*, 19:238–255.
- Vasalampi K, Salmela-Aro K, Nurmi JE (2010) Education-related goal appraisals and self-esteem during the transition to secondary education: a longitudinal study. *Int J Behav Dev*, 34:481–490.
- Vaux A, Harrison D (1985) Support network characteristics associated with support satisfaction and perceived support. *Am J Community Psychol*, 13:245–265.
- Walburg V (2014) Burnout among high school students: a literature review. *Child Youth Serv Rev*, 42:28–33.
- Walburg V, Mialhes A, Moncla D (2016) Does school-related burnout influence problematic Facebook use?. *Child Youth Serv Rev*, 61:327–331.
- Wei X, Wang R, MacDonald E (2015) Exploring the relations between student cynicism and student burnout. *Psychol Rep*, 117:103–115.
- Wright TA, Cropanzano R (1998) Emotional exhaustion as a predictor of job performance and voluntary turnover. *J Appl Psychol*, 83:486–493.
- Xanthopoulou D, Bakker AB, Demerouti E, Schaufeli WB (2009) Reciprocal relationships between job resources, personal resources, and work engagement. *J Vocat Behav*, 74:235–244.
- Yang HJ (2004) Factors affecting student burnout and academic achievement in multiple enrollment programs in Taiwan's technical–vocational colleges. *Int J Educ Dev*, 24:283–301.
- Yiu-kee C, Tang CS (1995) Existential correlates of burnout among mental health professionals in Hong-Kong. *J Ment Health Couns*, 17:220–229.

---

**Author Contributions:** All authors attest that each author has made an important scientific contribution to the study and has assisted with the drafting or revising of the manuscript.

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** No conflict of interest was declared by the authors.

**Financial Disclosure:** The authors declared that this study has received no financial support.

**Acknowledgement:** This article has been derived from first author's doctoral dissertation.

---