

## Research Article

# School Burnout and its Psychological Concomitants Among Students from Three School Types in Pakistan

 Nazia Nazar,  Karin Österman,  Kaj Björkqvist

Department of Psychology, Åbo Akademi University, Vaasa, Finland

### Abstract

**Objectives:** The aim of the study was to investigate associations between school burnout and its concomitants among students in three types of schools in Pakistan.

**Methods:** Five hundred and fifty girls and 550 boys from Urdu medium, Elite English medium, and the Madrassa, in Pakistan completed a questionnaire. The age range was between 11 and 15 years of age. The questionnaire included scales measuring school burnout, anxiety, hostility, depression, and self-esteem.

**Results:** Students with high levels of school burnout scored higher than others on anxiety, hostility, depression, and lower on self-esteem. Boys had experienced higher levels of school burnout, anxiety, hostility, and depression, and lower levels on self-esteem than girls. Boys from Urdu medium schools reported the highest scores on school burnout, while girls from the same school type reported the lowest ones. Students from English medium schools had the highest scores on self-esteem, and the lowest scores on anxiety, hostility and depression. Students from the Madrassa showed the highest levels of anxiety, hostility, and depression and the lowest levels of self-esteem.

**Conclusion:** School burnout was associated with negative psychological concomitants. Differences were found between the three school systems.

**Keywords:** Pakistan; school burn out, school systems

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The aim of the study was to investigate associations between school burnout and psychological concomitants among students in three types of schools in Pakistan. The term burnout was coined by Freudenberger.<sup>[1]</sup> In 1986, the widely used Maslach Burnout Inventory was introduced.<sup>[2]</sup> Burnout has been described as a prolonged response to chronic emotional and interpersonal workplace stressors, and three dimensions of the syndrome have been identified: exhaustion, cynicism, and inefficacy.<sup>[3]</sup> According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)<sup>[4]</sup> burnout is not recognised as a distinct disorder. The International Statistical Clas-

sification of Diseases and Related Health Problems will in its upcoming version (ICD-11) describe burnout as a result of chronic workplace stress that has not been successfully managed, and is characterised by (a) feelings of energy depletion or exhaustion; (b) increased mental distance from one's work, or feelings of negativism or cynicism related to it; and (c) reduced professional efficacy.<sup>[5]</sup> Burnout has previously been studied primarily in workplaces while school related burnout is a relatively a new concept.<sup>[6]</sup> Accordingly, there is a scarcity of studies on school-related burnout and its psychological concomitants among adolescents.

**Address for correspondence:** Karin Osterman, MD. Department of Psychology, Åbo Akademi University, PB 311, 65101 Vaasa, Finland

**Phone:** +358-6-3247468 **E-mail:** karin.osterman@abo.fi

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## Concomitants of Burnout

In adults, work-related burnout has been associated with negative mental health outcomes and an increased risk for depression,<sup>[7-9]</sup> low self-esteem,<sup>[10]</sup> and risk for suicide.<sup>[11]</sup> Burnout has also been found to predict insomnia, cardiovascular disease<sup>[12]</sup> and accelerated biological aging.<sup>[13]</sup>

Concomitants of school-related burnout have also been studied. A literature review was carried out on school burnout among high school students in Northern Europe, Eastern Europe, Asia, Turkey, and Malaysia.<sup>[14]</sup> It was based on sixteen studies conducted between 2001 and 2013. The review indicated several risk factors and mental health consequences of school burnout. School burnout has been shown to correlate positively with depression and negatively with self-esteem.<sup>[15]</sup> A negative self-image has been found to predict school burnout; secondary school students with a negative self-image have been found to be more susceptible to burnout.<sup>[16]</sup> School-related burnout was also associated with anxiety. Students suffering from school-related burnout have been found to experience exhaustion due to study demands, a cynical attitude towards their studies, and feelings of inadequacy as a student.<sup>[17]</sup> School burnout has been shown to more likely lead to depressive symptoms than vice versa.<sup>[18]</sup>

## Sex Differences in Burnout and Depression

Girls in Finland have been shown to have higher scores of school burnout than boys.<sup>[19]</sup> In Norway, adolescent girls were found to have more worries concerning school achievement than boys.<sup>[20]</sup> Also, in Slovenia, in a sample of grammar school pupils, girls were shown to suffer from higher academic stress and stress related anxiety than boys.<sup>[16]</sup> Independent of academic success, 9<sup>th</sup> grade girls in Germany have reported higher levels of exhaustion than boys.<sup>[21]</sup> A study from Portugal showed no significant sex differences in burnout among secondary school students.<sup>[22]</sup>

Female adolescents have been shown to report more depressive symptoms and negative self-esteem than boys.<sup>[23]</sup> The cultural context may also be associated with sex differences in depression. In a comparative study of 13–15 year old adolescents in Iran and Finland, Finnish girls scored higher on depression, anxiety and hostility than boys, while no sex difference was found among the Iranian adolescents.<sup>[24]</sup> Similarly, in another study conducted with 6-12 years old children in Iran, it was found that girls scored lower on attention problems, delinquent and aggressive behaviour, and externalising problems than boys.<sup>[25]</sup>

## School Climate, Academic Performance, and Burnout

School climate has also been associated with school burn-

out. A study from Finland found that a negative school climate was positively associated with burnout among students, while school support, on the other hand, was negatively related to it.<sup>[6]</sup> School dropout has been found to be predicted by cynicism, which is a typical feature of school burnout.<sup>[26]</sup> In two studies it has, however, been found that mistreatment of students was associated with burnout.<sup>[27, 28]</sup>

A study of 9<sup>th</sup> graders in Finland found that members of high achieving adolescent peer groups had lower levels of school burnout.<sup>[29]</sup> Another study, however, found that success-oriented students were more prone to burnout.<sup>[30]</sup> While in Germany, low school achievement has been shown to be associated with high levels of school burnout.<sup>[21]</sup> In a study carried out with Italian high school students, it was found that school burnout exerted a direct strong effect on school achievement, and that it also affected achievement indirectly via depressive symptoms and low school engagement.<sup>[31]</sup>

## Context of the Study: Schools in Pakistan

The educational sector in Pakistan is divided in different types of schools of which some are public and some are private. The three most common types of schools are Urdu medium schools, English medium schools, and the Madrassa. Urdu medium schools are mostly public schools where the medium of instruction is Urdu while English medium schools are usually run by the private sector and has English as its language of instruction. The Madrassa are religious schools which mainly impart religious education along with studies in the humanities and science. It has been found that English medium schools differ from Urdu medium schools and the Madrassa. Students in English medium schools have been shown to exhibit more religious tolerance than students from Urdu medium schools and the Madrassa.<sup>[32]</sup> It has furthermore been shown that victimisation from physical punishment at school was lowest among students enrolled in English medium schools in comparison with other school types.<sup>[33]</sup> Another study has also found that physical punishment at school was common among students from Urdu medium schools and the Madrassa.<sup>[34]</sup>

School-related burnout has not been studied extensively in Pakistan, but burnout and occupational stress have been found among teachers in Pakistan.<sup>[35, 36]</sup> It has also been found that medical students in Pakistan had suffered from burnout,<sup>[37, 38]</sup> anxiety, and depression.<sup>[39, 40]</sup> The present study was designed to investigate the relationship between school burnout and psychological concomitants, in three types of schools in Pakistan.

## Methods

### Sample

Five hundred fifty girls and 550 boys from three types of schools in Pakistan completed a questionnaire. The three school types were Urdu medium (200 girls, 200 boys), Elite English medium (175 girls, 175 boys), and the Madrassa (175 girls, 175 boys). The age range of the participants was between 11 and 15 years of age. The mean age for girls was 13.3 years (SD 1.0), and for boys 14.1 (SD 1.0). The age difference between girls and boys was significant [ $t(1098)=13.89, p<0.001$ ].

### Instrument

The questionnaire included five scales measuring school burnout, anxiety, hostility, depression, and self-esteem. School burnout was measured with the School Burnout Inventory,<sup>[17]</sup> which consists of the following ten items: (a) I feel overburden by my schoolwork, (b) I feel a lack of motivation in my schoolwork and often think of giving up, (c) I often have feelings of inadequacy in my schoolwork, (d) I often sleep badly because of matters related to my schoolwork, (e) I feel that I am losing interest in my schoolwork, (f) I am continuously wondering whether my schoolwork has any meaning, (g) I brood over matters related to my schoolwork a lot during my free time, (h) I used to have higher expectations of my schoolwork than I do now, (i) The pressure of my schoolwork causes me problems in my close relationships with others, and (j) I feel that I don't improve in my schoolwork. The response alternatives for the school burnout scale were on a six-point scale (0=completely disagree, 1=partly disagree, 2=disagree, 3=partly agree, 4=agree, 5=completely agree). Cronbach's Alpha for the burnout scale was 0.79.

Anxiety, hostility, and depression were measured with three subscales of the the Brief Symptom Inventory.<sup>[41]</sup> Responses were given on five point scales (0=not at all, 1=slightly, 2=moderately, 3=very much, 4=extremely much). Anxiety was measured with the following six items: (a) nervousness or shakiness inside, (b) being suddenly scared for no reasons, (c) feeling fearful, (d) feeling tense or anxious, (e) spells of terror or panic, and (f) feeling so restless you could not sit still. Cronbach's Alpha for the scale was 0.93.

Hostility was measured with the following five items: (a) feeling easily annoyed or irritated, (b) temper outbursts that you could not control, (c) having urges to beat, injure or harm someone, (d) having urges to break or smash things, and (e) getting into frequent arguments. Cronbach's Alpha for the hostility was 0.93.

Depression was measured with six items: (a) feeling hope-

**Table 1.** Correlations between the scales in the study girls (n=550) above and boys (n=550) below the diagonal

	1.	2.	3.	4.	5.
1. School burnout	–	0.44***	0.40***	0.43***	-0.08***
2. Anxiety	0.47***	–	0.76***	0.76***	-0.22***
3. Hostility	0.49***	0.85***	–	0.79***	-0.25***
4. Depression	0.50***	0.85***	0.88***	–	-0.27***
5. Self-esteem	-0.18***	-0.43***	-0.40***	-0.42***	–

\*\*\*:  $P<0.001$ .

less about the future, (b) feelings of worthlessness, (c) feeling lonely, (d) feeling sad, (e) having no interest in things, and (f) having thoughts of ending your life. Cronbach's Alpha for the scale was 0.93.

The following three items from the Rosenberg Self-esteem Scale<sup>[42]</sup> were included in order to measure self-esteem: (a) On the whole, I am satisfied with myself, (b) I feel that I have a number of good qualities, and (c) I am able to do things as well as most other people do. The response alternatives were on a five point scale (0=strongly disagree, 1=disagree, 2=undecided, 3=agree, 4=strongly agree). Cronbach's Alpha for the scale was 0.77.

### Procedure

The study was conducted with paper-and-pencil questionnaires in 17 schools in Lahore, Pakistan. Six Urdu medium public schools, six English medium elite schools and five Madrassa were included in the study. The data were collected between December 2016 and April 2017.

### Ethical Considerations

All respondents were anonymous, and the study was carried out in accordance with the principles concerning human research ethics of the Declaration of Helsinki,<sup>[43]</sup> and guidelines for the responsible conduct of research.<sup>[44]</sup>

## Results

### Correlations Between the Scales in the Study

For both girls and boys, all the scales of the study correlated significantly with all other scales ( $p<0.001$  for all) (Table 1). Self-esteem was negatively correlated with all the other scales for both girls and boys. For both girls ( $r=0.79$ ), and boys ( $r=0.88$ ), the highest positive correlation was found between hostility and depression.

### Differences Due to Sex and School Type

A multivariate analysis of variance (MANOVA) was conducted with sex and school type as independent variables, school burnout, anxiety, hostility, depression, and self-es-

**Table 2.** Results of a multivariate analysis of variance (MANOVA) with sex and type of school (2 x 3) as independent variables, five scales as dependent variables, and age as a covariate (n=1100). Cf. Fig. 1.

	F	df	p<	$\eta_p^2$	Group differences	
Age as covariate, multivariate	4.71	5, 1089	0.001	0.095		
Effect of sex						
Multivariate analysis	28.30	5, 1089	0.001	0.115		
Univariate analyses						
School burnout	100.80	1, 1093	0.001	0.084	♂ > ♀	
Anxiety	29.30	"	0.001	0.026	♂ > ♀	
Hostility	33.03	"	0.001	0.029	♂ > ♀	
Depression	64.05	"	0.001	0.055	♂ > ♀	
Self-esteem	40.62	"	0.001	0.036	♀ > ♂	
Effect of type of school						
Multivariate analysis	48.63	10, 2180	0.001	0.182		
Univariate analyses						
School burnout	5.77	2, 1093	0.003	0.010	U < E, M	
Anxiety	188.05	"	0.001	0.256	E < U < M	
Hostility	130.59	"	0.001	0.193	E < U < M	
Depression	125.21	"	0.001	0.186	E < U < M	
Self-esteem	58.12	"	0.001	0.096	E > U > M	
Interaction between sex and type of school						
Multivariate analysis	16.91	10, 2180	0.001	0.072		
Univariate analyses					Highest	Lowest
School burnout	40.81	2, 1093	0.001	0.069	U♂	U♀
Anxiety	34.41	"	0.001	0.059	M♂	E♂
Hostility	30.60	"	0.001	0.053	M♂	E♂
Depression	40.52	"	0.001	0.069	M♂	E♂
Self-esteem	13.84	"	0.001	0.025	E♂	M♂

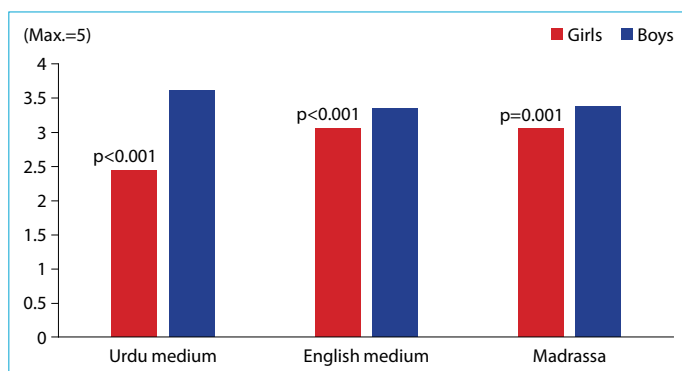
U: Urdu medium; E: English medium; M: Madrassa.

teem as dependent variables, and age as a covariate (Table 2). The multivariate analyses were significant for sex and school type. The univariate analyses showed that boys had experienced significantly higher levels of school burnout, anxiety, hostility, and depression than girls, and that girls scored significantly higher on self-esteem. According to Scheffé's test, students from the Urdu medium schools scored significantly lower than the students from English medium schools and the Madrassa on school burnout. Students from English medium schools had significantly lower scores on anxiety, hostility and depression, and significantly higher scores on self-esteem compared to students from both the Urdu medium schools and the Madrassa. The students from the Urdu medium schools had in turn significantly lower scores on anxiety, hostility and depression, and significantly higher scores on self-esteem compared to students from the Madrassa. Students from the Madrassa had the significantly highest scores on anxiety, hostility, and depression, and the significantly lowest on self-esteem. The interaction between sex and school type was significant. Girls from Urdu medium schools re-

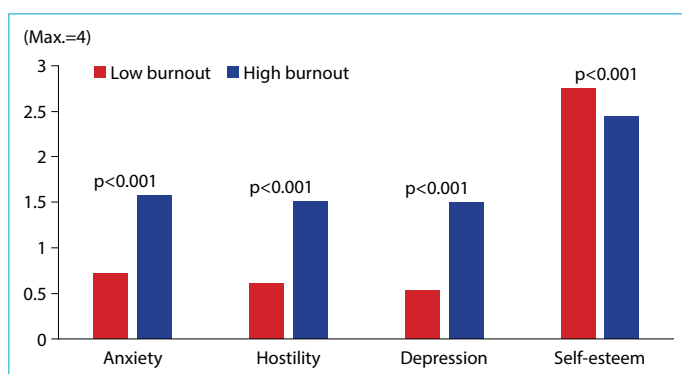
ported the significantly lowest scores on school burnout ( $m=2.4$ ), while boys from the same school type reported the highest ones ( $m=3.6$ ) (Fig. 1). Among boys going to Urdu medium schools, the three highest mean values of single burnout items were as follows: The pressure of my schoolwork causes me problems in my close relationships with others ( $m=4.7$ ), I brood over matters related to my schoolwork a lot during my free time ( $m=4.6$ ), and I often sleep badly because of matters related to my schoolwork ( $m=4.5$ ). The highest scores on self-esteem was reported by girls from English medium schools ( $m=3.1$ ), and boys from the Madrassa reported the lowest scores ( $m=1.7$ ). Boys from English medium schools reported the lowest scores for anxiety ( $m=0.3$ ), hostility ( $m=0.3$ ), and depression ( $m=0.3$ ), while boys from the Madrassa reported the highest scores for anxiety ( $m=2.0$ ), hostility ( $m=2.0$ ), and depression ( $m=2.1$ ).

### High vs. Low Burnout

Two groups were created, one with higher scores than average on school burnout and one with lower scores than



**Figure 1.** Mean values on school burnout for girls and boys from three school types in Pakistan (n=1.100), Cf. Table 2.



**Figure 2.** Mean values for students with high vs. low school burnout on victimisation on four psychological concomitants (n=1.100), Cf. Table 3.

average. A multivariate analysis of variance (MANOVA) was conducted with burnout group (high/low) as independent variable and anxiety, hostility, depression, and self-esteem as dependent variables (Table 3, Fig. 2). The multivariate analysis showed a significant overall group difference. The univariate analyses showed that students with higher levels than average on school burnout scored significantly higher on anxiety, hostility, and depression, and lower on self-esteem than students with lower burnout scores.

**Table 3.** Results of burnout groups (high/low) multivariate analysis of variance (MANOVA) with four scales as dependent variables (n=1100). Cf. Fig 2.

	F	df	p<	$\eta_p^2$
Effect of burnout group (High/Low)				
Multivariate analysis	48.97	4, 1095	0.001	0.152
Univariate analyses				
Anxiety	149.90	1, 1098	0.001	0.120
Hostility	156.61	"	0.001	0.125
Depression	190.32	"	0.001	0.148
Self-esteem	21.34	"	0.001	0.019

## Discussion

The study investigated the relationship between school burnout and its psychological concomitants among students in three types of schools in Pakistan. It was found that school burnout was associated with high levels of anxiety, hostility, and depression among pupils. Similar findings have previously been made in Finland,<sup>[18]</sup> in Slovenia<sup>[16]</sup> and in the US.<sup>[15]</sup> Students with high levels of school burnout also scored significantly lower on self-esteem. This has also been found in the US<sup>[15]</sup> and in Sweden.<sup>[10]</sup>

## Sex Differences

A significant sex difference regarding burnout was found; boys reported higher levels of school burnout than girls. This finding was unexpected since previous studies from other countries, mainly Western ones, have shown girls to have higher levels of school burnout than boys.<sup>[6, 14, 21, 45]</sup> However, a comparative study of school burnout in Iran and Finland<sup>[46]</sup> showed that Iranian boys had the highest scores of school burnout in the study, higher than Iranian girls, and also higher than both girls and boys in Finland. Finnish boys, on the other hand, scored lowest on school burnout. Accordingly, with the inclusion of this study, there are now two studies conducted in Muslim countries (Iran and Pakistan), showing boys to experience more school burnout than girls. This circumstance makes it difficult to rule out the finding as a coincidence. It could be an indication of higher expectations of academic success laid upon boys in Muslim homes. They are the ones who are expected to assume the responsibility of their families in the future. Hence, boys perhaps feel more pressure from their parents to perform well in their studies. The finding also shows that the higher level of school burnout among girls in Western countries is not a universal truth, but a culturally determined phenomenon.

In the current study, boys also had higher levels of anxiety, hostility, and depression, and lower self-esteem. This is also in contrast with studies from other countries where boys have been found to have lower levels than girls on anxiety, hostility, and depression, in Finland,<sup>[24]</sup> and higher levels of self-esteem in both Switzerland,<sup>[47]</sup> and Finland.<sup>[24]</sup> In Iran, no sex differences were found for depression, anxiety, and self-esteem.<sup>[24]</sup> The findings might also be due to cultural differences. In Pakistan, girls spend most of their time at home where they enjoy full support from their parents and paternal parents. It might be easier for girls to release their stress by sharing problems with their family. Boys have previously been found to be more victimised from physical punishment at school than girls in Pakistan.<sup>[33]</sup> This might be another reason why boys scored higher on anxiety, hostility and depression, and lower on self-esteem.

## School Type

Students from elite English medium schools had the highest scores on self-esteem, and the lowest scores on anxiety, hostility, and depression. Previous studies comparing school types in Pakistan have found that victimisation from physical punishment by teachers was lowest among students enrolled in the English medium schools.<sup>[33]</sup> This could be an explanation for them scoring high on self-esteem and low on anxiety, hostility and depression. Students from English medium schools have also previously been found to score higher than pupils from other school types on religious tolerance,<sup>[49,50]</sup> and gender equality, and lowest on bellicose attitudes as compared to students from Urdu medium schools and the Madrassa.<sup>[32]</sup> These findings may be related to the structure of the educational system in Pakistan, which is divided according to socioeconomic class.<sup>[48]</sup> Students from English medium schools predominantly come from the elite class and enjoy all kinds of socio-economic benefits.<sup>[51]</sup> This could be yet another reason why students from English medium schools scored lowest on depression, anxiety, and hostility, and highest on self-esteem.

Students from Urdu medium schools had lower levels of anxiety, hostility and depression, and higher levels of self-esteem than students from the Madrassa. This is in line with a previous study in which students from Urdu medium schools scored higher on gender equality than students from the Madrassa.<sup>[32]</sup> However, another study has showed that differences between Urdu medium schools and Madrassa were insignificant for victimisation from physical punishment by a teacher, physical injuries from being punished by a teacher, and acceptance of physical punishment at school.<sup>[33]</sup> Differences between Urdu medium schools and Madrassa might be due to differences in socio-economic class. Students from Urdu medium schools usually belong to the working or the lower-middle class while Madrassa students come from deprived and poor families.<sup>[48]</sup> Madrassa students face many socio-economic and domestic problems. Furthermore, students in the Madrassa might feel more study pressure due to the compulsory Arabic language subjects.

In the present study, students from the Madrassa (girls and boys together) scored highest on anxiety, hostility, and depression, and lowest on self-esteem. Boys from the Madrassa had the significantly highest scores of all groups on depression and the lowest on self-esteem. The Madrassa administration provides boarding facilities for male students. Hence, boys from the Madrassa live away from their families and have less interaction with them. Boys in the Madrassa have also previously been found to be most of-

ten victimised from physical punishment by a teacher.<sup>[33]</sup> This might be a contributing reason for the highest levels of anxiety, hostility and depression, and the lowest self-esteem in the sample.

An interaction was found between school type and sex. Girls from the Urdu medium schools scored significantly lowest on school burnout, and boys from the same schools scored significantly highest compared to all the other groups. This difference might be due to the fact that students from Urdu medium come from lower middle-class families where boys are considered to become the bread earners for their families. Hence, they might face higher expectations for academic success from their parents which in turn might increase the level of school burnout. This, however, does not explain why the difference between girls and boys on burnout were greater among the Urdu pupils than among the other groups.

## Limitations of the Study

There are many different types of schools in Pakistan, but the data of the current study were drawn from and limited to three types of schools from one city. Age and socioeconomic background were not directly investigated, but the choice of school is in itself an indicator of social class. It should also be pointed out that burnout was studied as a general phenomenon, and its individual symptoms of exhaustion, cynicism, and inadequacy were not investigated separately.

## Implications of the Study

School burnout is a relatively new concept, and a limited number of studies of the phenomenon is available worldwide. Furthermore, there is no awareness of the concept of school burnout among children and adolescents in Pakistan. The study introduces this field of research in Pakistan. It provides empirical data for policy makers to take concrete steps to improve the educational sector, and to ensure a protected environment that supports mental health of school children in Pakistan.

## Disclosures

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