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**Original Investigation** 



# Academic Burnout among Students studying in Selected **Secondary School of Chitwan**

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### **ABSTRACT**

Article history: INTRODUCTION: Academic burnout has been widely reported in recent decades in different countries among students. Today's students are facing dual stress in their academic endeavor i.e., higher academic expectations and perceived pressure from their parents. The aim of the study is to assess the level of academic burnout among the plus two students. MATERIAL AND METHODS: A cross-sectional study was done among secondary level students in a school of Bharatpur municipality. The study was conducted during October 2021 and December 2021 among plus two level students. A self-administered questionnaire was used for data collection. Burnout was measured by using a 25 items tool comprising different types of burnout. Descriptive and inferential statistics were computed at 5% level of significant. RESULTS: Of total; 62.2% and 7.4% students had mild and moderate burnout respectively. Median value of total burnout was 56 out of the maximum value 125. There was strong significant correlation between personal and study related burnout, moderate significant correlation between personal and classmate related, and between personal and instructor related burn out. There was significance difference in the median personal burn out and instructor related burnout level among male and female students. CONCLUSIONS: High academic burnout was found among secondary level students. Intervention is required to address the burden.

Keywords: Academic burnout, personal burn out, study related burn out

# **INTRODUCTION**

The concept of burnout was first proposed by an American psychologist, Freudenberger in the 1970s [1]. Academic burnout or student burnout is defined as "a psychological syndrome of emotional exhaustion, depersonalization, personal accomplishment that occurs as a response to emotional and interpersonal stressors among individuals" [2,3]. Today's students are facing dual stress in their academic endeavour i.e., higher academic expectations and perceived pressure from their parents. Documented sources of academic burnout have included fear of falling behind with coursework, time pressures, financial worries, and concern about academic ability [4]. When students feel pressured fulfilling their academic tasks, they maladaptive may present behaviors like absenteeism, worse grades including aggressive behaviors, which may into result consequences for their future health [5,6].

Some of other symptoms of academic burnout are constant tiredness and fatigue, mental exhaustion, ability to nurture their personal relationships, social distancing, complex mood states (such as anxiety, irritability and, in some cases, mild depression), difficulty in being focused or attentive during any task, weight loss and muscle spasms, hormonal and metabolic disorders, allergies and migraines, insomnia and abuse of psychotropic and narcotic substances, alcohol or other drugs [7]. Students' level of academic burnout has been widely explored in recent decades in different countries with the prevalence between 6.7% to more than 40% [7-10].

Academic burnout is reported more frequent in Asian countries [11,12]. Though, there are numbers of studies conducted on academic burnout among medical students in Nepal, very scant researches are conducted among school students. So, the aim of this study was to find out the magnitude of different types of academic burnout among the plus-two level students.

# MATERIAL AND METHODS

# Study design and setting

This was a cross-sectional study conducted among plus two level students in a school of Bharatpur metropolitan city from October 2021 to December 2021. Bharatpur Metropolitan City in the central-southern part of Nepal located in Chitwan District. Bharatpur City is the District headquarter of the Chitwan District and is the fifth largest city of Nepal with the population of 199,867. Bharatpur is one of the fast-growing cities of Nepal. It lies on the left bank of Narayani River and serves as a commercial centre of Chitwan district and central region of Nepal [13].

# Participants, sampling and sample size

Plus two level students were enrolled in this study following complete enumeration technique incorporating total students studying same level at Sun Rise English school Bharatpur Chitwan. Plus two level student, usually adolescents, are the fragile group of population. Documented sources of academic burnout have included fear of falling behind with coursework, time pressures, financial worries, and concern about academic ability [4, 14] Data among these students was collected through self-administered tool called "The Copenhagen Burnout Inventory Student version (CBI-S)" on 24th May 2022 to 26th May 2022 [15]. A total of 230 participants were enrolled in the study.

# Data collection and study variables

After the brief introduction, sharing of study objectives and brief procedural orientation to fill the study questionnaire participants were asked to self-administer the questionnaire. Students' seating was arranged with proper space between each individual by keeping only 2 students per bench for maintaining confidentiality during filling the Likert scale and 30 (thirty) minutes was provided to complete. After 30 minutes filled questionnaire were collected back. Anonymity was maintained by allotting unique number to each questionnaire.

Burnout was measured by using a 25 items 'the Copenhagen Burnout Inventory Student version' (CBI-S) comprising different type of burnout [15]. Copenhagen Burnout Inventory (CBI) adopted for students by Campos et al. [16] CBI-S, translated and validated by authors [17, 18]. The CBI-S consists of

25 items that represent four dimensions: Personal Studies-Related Burnout, Colleague-Related Burnout, and Teacher-Related Burnout (TRB). The answers that can be given to each item were "always = 100", "frequently = 75" "sometimes = 50" "rarely = 25" and "never = 0", with inverse scoring for item 10. For each scale, a total average score was calculated. A burnout level (severity) was assessed according to Kristensen's criteria [19]. Internal consistency of CBI-S among current sample was excellent (Cronbach's  $\alpha = 0.942$ ) [20]. The measured score was classified <50 score as minimal or no burnout, score of 50 to 74 are considered 'mild burnout 75-99 are moderate and a score of 100 or above is considered severe burnout.

# Data management and Statistical analysis

Data were entered and analyzed using SPSS version 20. Descriptive statistics such as frequency, central tendencies were computed. Pearson correlation was computed to see the correlation between type of burnout and total burnout among secondary students. Independent samples Mann-Whitney U Test was computed to see the difference of burnout among male and female students. Level of significant was set t 5% level of significant.

# **Ethical consideration**

Ethical clearance was obtained from the Chitwan Medical College Institutional review committee (ref no.: CMC IRC 077/78-226) prior the data collection.

# RESULTS

Of the total 230, 62.6% students were male and 72.2% were in the age group of 15 to 17 years. Among the study population, 53.5% were in the grade 11 and 42.2% belongs to Brahmin ethnicity. Regarding the burnout status, less than one third, 30.4% were normal or has not burnout symptoms; 62.2% and 7.4% had mild and moderate burnout respectively (Table 1).

Table 1   Demographic Characteristics of the students					
Variables		Frequency	Percentage		
Sex	Male	144	62.6		
Sex	Female	86	37.4		
Age group	15 to 17	166	72.2		
(in years)	18 to 20	64	27.8		
C 1.	11.00	123	53.5		
Grade	12.00	107	46.5		
Ethnicity	Brahmin	97	42.2		
	Chhetri	53	23.0		
	Janajati	56	24.3		
	Other	24	10.4		

Majority of respondents were falling under the category of mild burnout (62%) followed by minimal or no burnout (31%). A total of 7 percent of respondents fall under the moderate burnout category. (Figure-1). Grade of students (p<0.001) and ethnicity (p<0.05) were significant with the level of burnout whereas gender (p=0.774) and age(p=0.161) were not significant with the level of burnout (Table 2). Median personal burnout was 15 out of the maximum 30 whereas median of study related burnout was 18 out of the maximum 35. Similarly, median of classmate related burnout and instructor related burn out was 11 out of 30. While combining all types of burnout, median value of total burnout was 56 out of the maximum value 125 (Table 3).

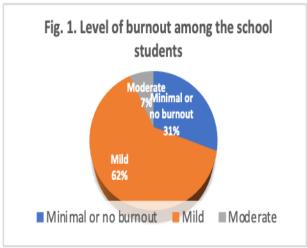


Figure-1 | Level of burnout among the schoolchildren

Table 2   Level of burnout and its association with sociographic variables (n=230)						
Variables	Catanama	1				
variables	Category	Minimal (%)	Mild (%)	Moderate (%)	p-value	
Sex	Male	46 (31.9)	87(60.4)	11(.6)	0.774	
Sex	Female	24(27.9)	56(65.1)	6(7.0)	0.774	
A ~~	15-17	50(30.1)	107(64.5)	9(5.4)	0.161	
Age	18-20	20(31.3)	36(56.3)	8(12.5)		
Grade	11	44(35.8)	78(63.4)	1(0.8)	0.000	
Grade	12	26(24.3)	65(60.7)	16(15)	0.000	
	Brahmin	40(41.2)	53(54.6)	4(4.1)		
Ethnicity	Chhetri	11(20.8)	36(67.9)	6(11.3)	0.029	
	Other*	19(23.8)	54(67.5)	7(8.8)		
Religion#	Hindu	62(32.0)	119(61.3)	13(6.7)		
	Buddhist	8(26.7)	19(63.3)	3(10.0)	NA	
	Other**	0(0.0)	5(83.3)	17(7.4)		

Table 3   Academic burnout among students						
Burnout	Minimum	Maximum	Median	95% CI		
Personal (6 items)	9	28	15.00	14.58-15.46		
Study related (7 items)	9	34	18.00	17.91-19.14		
Classmate related	6	25	11.00	10.76-11.75		
Instruction related (6 items)	6	30	11.00	11.31-12.56		
Total (25 items)	34	102	56.00	55.16-58.34		

Table 4  Correlation between study related and classmate related, and classmate related and instructor related					
Burnout	Personal	Study related	Classmate related	Instruction related	Total
Personal	1	0.571**	0.321**	0.338**	0.732**
Study related	0.571**	1	0.158*	0.519**	0.799**
Classmate related	0.321**	0.158*	1	0.294**	0.577**
Instructor related	0.338**	0.519**	0.294**	1	0.781**
Total	0.732**	0.799**	0.577**	.781**	1

Note: \*\* p value  $\leq$ 0.01; p value  $\leq$  0.05 level

The study shows the correlation between the different components of burnouts and of component with total burnout. There is strong significant correlation between personal and study related burnout. There is moderate significant correlation between personal and classmate related, personal and instructor related burn out. However, weak but significant correlation between study related and classmate related, and classmate related and instructor related burnout (Table 4). There was significance difference in the median personal burn out and instructor related burnout level among male and female students. However, there was no difference in the study related, classmate related and total burnout level (Table 5).

# **DISCUSSION**

High dropout rates are harmful for the educational institutions, these tendencies are also detrimental from an individual perspective, as dropout is often associated with sociocultural or psychological issues [21]. When students perceive tensed fulfilling their school tasks, they may show maladaptive behaviors like absenteeism, worse grades including aggressive behaviors, which may result into severe consequences for their future health [5,6]. By assessing through the CBI -S tool, present study showed that more than two third, i.e., 69.6% were found having academic burnout where 62.2% were having mild burnout and 7.4% as moderate burnout. Similar study conducted in Soudi Arabia in 2017 also found similar finding where 67.1% of students were having burnout [22]. Another similar conducted in Malaysia comparatively low level of moderate level academic burnout, i.e., 25.0% and contradictory to our finding it reported 63.6% as high or severe academic burnout [23].

In the present study, Median personal burnout was 15 out of the maximum 30 where as median of study related burnout was 18 out of the maximum 35. Similarly, median of classmate related burnout and instructor related burn out was 11 out of 30. While combining all types of burnout, median value of total burnout was 56 out of the maximum value 125. Our study revealed that grade/class of the participants (p<0.01) and ethnicity of the participants (p<0.05) were significant towards

Table 5   Different type of burnout among male and
female students (n=230)

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Burnout	Mediar (Inter-qua	P value*			
	Male	Female			
Personal	14 (4.00)	16 (4.25)	0.000		
Study	18 (7.00)	18 (7.00)	0.736		
Classmate	11 (5.00)	10 (6.00)	0.960		
Instruction	11 (7.50)	10 (5.00)	0.009		
Total	55(18.00)	56(16.00)	0.748		

<sup>\*</sup>Independent samples Mann-Whitney U Test

academic burnout whereas there was no significant association of academic burnout with gender and age of the participants. Studies revealed a contrasting finding where burnout was found to increase over the increased years. [24, 25] The inconsistent results may possibly due to the various demographics in different fields. Very high prevalence of academic burnout in the present study suggest that the school should show some level of relaxation and flexibility towards students. There should be allotment of more extra-curricular activities including sports and academic visits. Exercise, take days off, limit study hours per day, take breaks, develop support system, dedicate time for fun, eat well, minimize distractors, sleep well, study with others, identify suitable study space(s), and recognize feelings of burnout are normal are some of the proven strategies to minimize the level of academic burnout among the students.

# CONCLUSION

Slightly more than two-third of the students were having academic burnout. Academic years and ethnicity was associated with the academic burnout. Median value of total burnout was 56 out of the maximum value 125. There was strong significant correlation between personal and study related burnout, moderate significant correlation between personal and classmate related, and between personal and instructor related burn out. Very high prevalence of academic burnout in the present study suggest that the school should show some level of relaxation and flexibility towards students.



#### ADDITIONAL INFORMATION AND DECLARATIONS

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