

Does Choice of Academic Stream Affect Mental Health?

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Abstract- Based on the empirical analysis the present research is designed to investigate whether the willing or unwilling choice of academic stream affects mental health among senior secondary students or not. For the purpose a sample of 206 students consisting of 132 those who have willingly chosen their academic stream and 74 those who have not willingly chosen their academic stream was selected from various schools of Chandigarh. An equal number of male and female students from grades 11 and 12 (mean age: 16.72 years) were included in the study. To measure mental health, General Health Questionnaire-12 (GHQ-12, Goldberg & Williams, 1988), Scale for Assessing Academic Stress (SAAS) by Sinha, Sharma and Nepal (2003), Life Satisfaction Scale by using Students' Life Satisfaction Scale (Huebner, 1991) and happiness using Oxford Happiness Inventory by Hills & Argyle (2002).

Keywords- Higher secondary students, academic stream, academic stress, mental health, happiness

I. INTRODUCTION

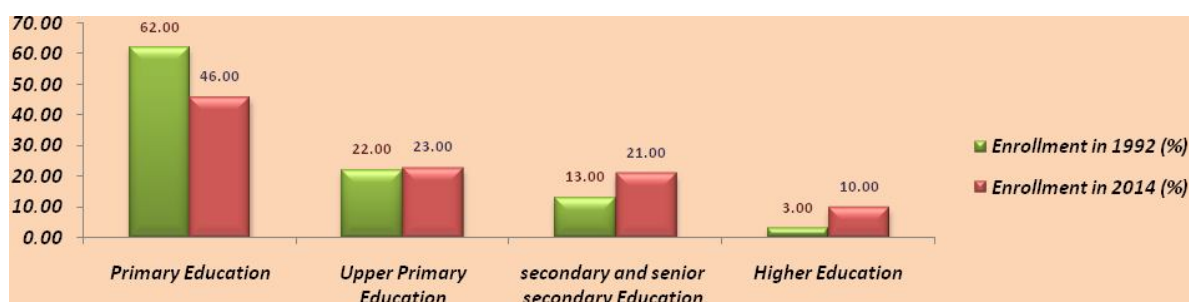
Education is one of the most necessary factors for people to go ahead in the life and get success. Education opens various options to achieving better prospects and promotes career growth by making us mentally, socially and intellectually strong by increasing our knowledge level. It enables us to live with dignity and respect and contribute to the development of the nation. It spread awareness about our rights and duties.

In most of the countries the education system has been divided into three divisions such as the primary education, secondary education and Higher Secondary education. All the divisions have their own relevance. According to the Educational Index prepared by UNDP 2013, Primary education creates base of learning, secondary education prepares the path for higher study and higher secondary education prepares the individual to learn specific skills to earn resources for whole life.

In India, the school education system is governed by two major categories of educational boards recognized by the

government of India. The first category includes the All-India Boards, like the Central Board of Secondary Education (CBSE), the Council for the Indian School Certificate Examinations (CICSE) and the National Open School. The second category includes the State Level Boards that are authorized to carry on their activities within the states where they are registered (Deb, Strodl & Sun., 2015). According to Pearson Voice of Teacher Survey 2015, in 2014 there were total 1.4 million schools and 712 universities in India. Despite the fact that there were 285 million students studying and 8.2 million teachers teaching in these schools and universities still India ranked 145 out of 195 countries as per Educational Index by United Nations Development Program in Human Development Report 2013 and ranked 92 out of 142 countries according to The Legatum Prosperity Index 2015.

According to Pearson Voice of Teacher Survey 2015 in 2014 out of 285 million students, 46 percent were enrolled in primary education, 23 percent were enrolled in upper primary, 21 percent were enrolled in secondary and senior secondary education and 10 percent were enrolled in higher education whereas in 1992 the total number of students in all the levels of education were 163 millions. Percentage of enrollment in primary, upper primary, secondary & higher secondary and higher education were 62, 22, 13 and 3 respectively.



Source: Pearson Voice of Teacher Survey 2015

This shows a huge enrollment growth in senior and higher secondary level of education which includes grade 9th to 12th. Higher secondary school education is a very important turning point in the academic life of the individual (Gahlot, 2017). The performance in matriculation board exam determines up to a certain extent whether the students will get his/her preferred stream or not. In India people are more inclined towards science and commerce streams rather than arts and humanities because the career prospects in science streams is somewhat more than arts and humanities (Deb, Strodl & Sun., 2015). Therefore science has become the preferred choice of students and their parents. Pearson Voice of Teacher Survey 2015 revealed that majority of teachers (57%) opined that students completing their education are not adequately prepared (have the required knowledge, skills, attitude and ethics) for employment and Teachers at the higher education level consider a much larger proportion of students unemployable (64%). Despite the other possible underlying causes behind student's un-employability some of the major reasons could be: (i) students not getting opportunity to pursue desirable stream because of low matriculation scores, lack of availability of institutions, or lack of resources in monetary terms (ii) students selecting streams of education under peer pressure, parental pressure or lack of career prospects even though they are not willing for it.

Unlike many Western countries, in India, it is difficult for a student to change their educational stream after completing school education (Deb et al., 2015). It becomes difficult for students to happily pursue their career in the field which they chose unwilling. This turmoil leads to dissatisfaction, academic stress, and other mental health issues to the students. Excessive academic stress during this stage could also results in increased prevalence of psychological problems like depression and nervousness, (Waghacharve et al., 2013) anxiety, substance abuse and suicide ideation (Bansal & Bhavne, 2006; Arria, et al., 2009) which negatively affects academic achievement of the students and their overall wellbeing.

There are a number of researches which discuss about academic stress among students and how it affects their mental health (Prabhu, 2015, Gahlot 2017) and students' psychological discomfort can be observed in various mental health problems such as depression, anxiety, stress, and sleeping disorders (Lejoyeux et al., 2011; Schraml et al., 2011; Boulard et al., 2012; Nyer et al., 2013; Petrov et al., 2014; Feld & Shusterman, 2015; Milojevich & Lukowski, 2016). According to a report published by National Crime Records Bureau, Ministry of Home Affairs, Government of India on 'Accidental deaths & suicides in India, 2015' a total number of 133623 individuals has committed suicide. 9408 individuals were below the age of 18 yrs out of which 8934 were students. Failure of examination was the cause of suicide for 1360 students. 26 students were from Chandigarh who have committed suicide and failure in examination was the cause behind suicide of six students.

A mentally healthy student accepts himself with his capabilities and his shortcomings, makes the best use of what he has and does not allow his personal weakness to interfere with his daily activities and his pursuit of long range goals (Rohilla, Singh & Batra, 2017). But, there are lacks of researches which compare the students who have willingly chosen their academic stream with those who have unwillingly chosen their academic stream. The current research intends to work towards the same. Therefore based on the above discussion the primary aim of the current study is to compare the mental health status, academic stress of students who have willingly chosen their academic stream are satisfied with it and those who have not willingly chosen their academic stream and are not satisfied with it.

II. OBJECTIVES

- To compare students who have willingly chosen their academic streams and are satisfied with it and those who have not willingly chosen their academic streams are not satisfied with it on mental health, academic stress, life satisfaction and happiness.

- To study the gender differences on mental health, academic stress, life satisfaction and happiness.
- To study the correlates of mental health, academic stress, life satisfaction and happiness.
- To study the predictors of mental health among students.

semi structured interview schedule was administered to identify students who have willingly selected their academic streams and are satisfied with it and those who have not willingly selected their academic streams and are not satisfied with it. The final sample for the present study was identified to be 206 (N). N=132 were those who have willingly chosen and are satisfied with their academic stream, N=74 were those who haven't willingly chosen and are not satisfied with their academic stream.

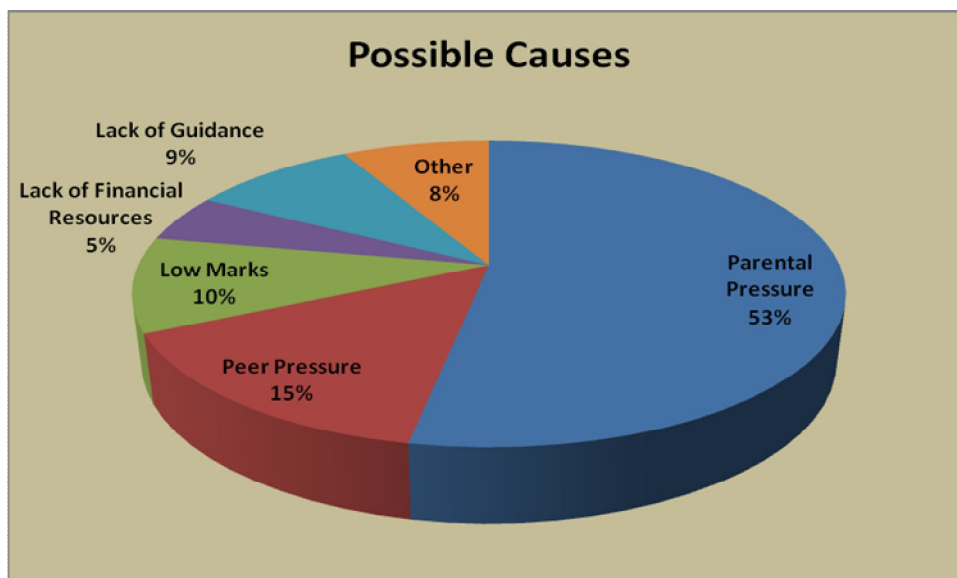
Sample

A sample of 530 students was selected from science, arts and commerce streams from various schools of Chandigarh of grades 11th and 12th (mean age: 16.72 years). A

Sample Stratification

	Willing & Satisfied (N=132)						Unwilling & Satisfied (N=74)					
Stream	Science		Arts		Commerce		Science		Arts		Commerce	
Total subjects	53		47		32		31		26		17	
Gender	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total subjects	26	27	24	23	16	16	15	16	13	13	9	8

Percentages of possible causes for streams chosen by the students



Source: Semi structured Interview Schedule.

Measures

To assess the **mental health**, GHQ-12 (Goldberg & Williams, 1988) was used. This is a 12 item scale and each question had 4 responses which were scored as 3-2-1-0. Total score ranges from 0-36. The higher score is the indicator of poor general and psychological health.

To assess **academic stress**, Academic Stress Scale (SAAS) developed by Sinha, Nepal, and Sharma (2003) was used. The scale consists of 30 items with yes or no alternatives. Score 1 is given for each 'yes' response and 0

for 'no' response. Total score ranges from 0-30. The higher score is the indicator of poor general and psychological health.

To assess **life satisfaction**, Students' Life Satisfaction Scale developed by Huebner, 1991 was used. This 7 item scale is based on 7 point likert scale (1- strongly disagree to 7- strongly agree). A total score is calculated by summing the 7 items. Total score ranges from 7-49. Higher score indicates higher satisfaction with life.

To assess **happiness**, Oxford Happiness Inventory by Hills & Argyle (2002) was used. The scale consists of 29

items. The scale is based on 6 point likert scale (1- strongly disagree to 6- strongly agree). The higher score is the indicator of higher state of happiness.

method. Further, stepwise regression was used to find out the predictors of mental health.

Design

The variables were measured using standardized scales. Statistical analysis was conducted using SPSS 20. t-test was calculated to assess the mean differences between the groups on all the variables. Correlations among the variables were calculated with the help of Pearson’s product moment

Procedure

For the present research, primary data was obtained through field survey method using questionnaires for each variable. Editing, scoring and coding were done manually. The data was then processed and analyzed using SPSS. Results obtained in the form of tables are discussed below.

III. RESULTS

Table-1. t-ratio between students who have willingly chosen their academic stream and are satisfied with it and those who have unwillingly chosen their academic stream and dissatisfied with it.

Groups		N	Mean	Std. Deviation	t-value	p-value
Mental Health	1	132	11.07	6.92	8.20**	<0.01
	2	74	17.10	7.13		
Academic Stress	1	132	5.41	5.69	7.47**	<0.01
	2	74	12.09	9.79		
Life satisfaction	1	132	31.57	7.10	4.82**	<0.01
	2	74	28.98	5.20		
Happiness	1	132	7.81	10.62	7.56**	<0.01
	2	74	14.13	8.12		

***. t-value significant at the 0.01 level (p<0.01)*

**. t-value significant at the 0.05 level (p<0.05)*

Group-1. Willingly chosen academic stream and satisfied

Group-2. Unwillingly chosen academic stream and unsatisfied

Table -2. t-ratio among male and female students.

Gender		N	Mean	Std. Deviation	t-value	p-value
Mental Health	1	103	14.13	7.89	2.28*	<0.05
	2	103	15.85	6.23		
Academic Stress	1	103	9.11	7.68	0.65	-
	2	103	8.59	7.03		
Life Satisfaction	1	103	10.08	4.83	0.75	-
	2	103	9.68	5.74		
Happiness	1	103	14.26	10.58	3.27**	<0.05
	2	103	12.38	7.82		

***. t-value significant at the 0.01 level (p<0.01)*

**. t-value significant at the 0.05 level (p<0.05)*

Group-1. Males

Group-2. Females

Table-3. Correlation between mental health, Academic stress, Life satisfaction and Happiness

<i>Pearson Correlation</i>	<i>Mental health</i>	<i>Academic Stress</i>	<i>Life Satisfaction</i>	<i>Happiness</i>
<i>Mental Health</i>	1	0.55**	-0.58**	-0.65**
<i>Academic Stress</i>	-	1	-0.60**	-0.59**
<i>Life Satisfaction</i>	-	-	1	0.72**
<i>Happiness</i>	-	-	-	1

*t value significant at 0.05 level, ** t value significant at 0.01 level

Table-4. Showing F value

<i>Model</i>		<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	50.58	0.00 ^b
	<i>Residual</i>		
	<i>Total</i>		
2	<i>Regression</i>	29.54	0.00 ^c
	<i>Residual</i>		
	<i>Total</i>		
3	<i>Regression</i>	65.51	0.00 ^d
	<i>Residual</i>		
	<i>Total</i>		

a. Dependent variable: mental health

b. Predictors: (constant), academic stress

c. Predictors: (constant), academic stress, life satisfaction

d. Predictors: (constant), academic stress, life satisfaction, happiness

Table-5. Showing model summary

<i>Model</i>	<i>Multiple R</i>	<i>R Square</i>	<i>Adjusted Square</i>	<i>R</i>	<i>Std. Error of the Estimate</i>	<i>R Square Change</i>	<i>Sig. F Change</i>
1	0.56 ^a	0.32	0.29	5.66	0.30	0.00	0.00
2	0.59 ^b	0.35	0.31	5.55	0.04	0.01	0.01
3	0.58 ^c	0.36	0.28	5.59	0.05	0.00	0.00

a. Predictors: (constant), academic stress

b. Predictors: (constant), academic stress, life satisfaction

c. Predictors: (constant), academic stress, life satisfaction, happiness

Table-6. Showing regression coefficients

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	β_0	3.26	2.05	-	1.56	0.12
	<i>Academic stress</i>	0.59	0.07	.55	7.15	0.00
2	β_0	3.34	2.05	-	1.60	0.10
	<i>Academic stress</i>	0.46	0.09	.42	4.82	0.00
	<i>Life satisfaction</i>	0.23	0.09	.24	2.51	0.01
3	β_0	15.72	2.21	-	7.11	0.00
	<i>Academic stress</i>	0.32	0.03	0.32	5.59	0.01
	<i>Life satisfaction</i>	0.32	0.04	0.31	3.15	0.00
	<i>Happiness</i>	-0.35	0.06	-0.24	-5.96	0.01

Dependent variable: mental health

IV. DISCUSSION

Table-1 is showing t-ratio between students who have willingly chosen their academic stream and are satisfied with it (Group-1) and those who have unwillingly chosen their academic stream and dissatisfied with it (Group-2). t-ratio on mental health come out to be 8.20** which shows a significant difference among group-1 and group-2 students ($p < 0.01$). Mean score (M) for group-1 come out to be 11.07 and for group-2 is 17.10 which indicates that students who have unwillingly chosen their academic stream score higher on mental health than those who have willingly chosen their academic stream and are satisfied with it. Higher score indicates poor mental health and vice versa.

t-ratio on academic stress is 7.47** which shows a significant difference among group-1 and group-2 students ($p < 0.01$). M group-1 is 5.41 and M group-2 is 12.09 which shows that students who have unwillingly chosen their academic stream score higher on academic stress than those who have willingly chosen their academic stream and are satisfied with it. Higher score indicates higher academic stress. t-ratio on life satisfaction come out to be 4.82** which shows a significant difference among group-1 and group-2 students ($p < 0.01$). M group-1 is 31.57 and M group-2 is 28.98 which indicates that students who have unwillingly chosen their academic stream score lower on academic stress than those who have willingly chosen their academic stream and are satisfied with it. Higher score indicates more life satisfaction.

t-ratio on happiness dimension is 7.56** which indicates a significant difference among group-1 and group-2 students ($p < 0.01$). M group-1 is 7.81 and M group-2 is 14.13 which shows that students who have unwillingly chosen their academic stream score higher on happiness than those who have willingly chosen their academic stream and are satisfied with it. Higher score indicates more happiness.

Table-2 is showing t-ratio between male and female students. t-ratio on mental health come out to be 2.28* which shows a significant difference among male and female students ($p < 0.02$). Mean score (M) for males come out to be 14.13 and for female is 15.85 which indicates that females score higher on mental health than males. Higher score indicates poor mental health and vice versa. t-ratio on academic stress and life satisfaction come out to be 0.65 and 0.75 respectively which indicates no significant difference among male and female students.

t-ratio on happiness dimension is 3.27* which indicates a significant difference among male and female

students ($p < 0.05$). M males come out to be 14.26 and for female is 12.38 which indicates that males score higher on happiness than females. Higher score indicates more happiness.

Table-3 is showing coefficient of correlation (r) between mental health, academic stress, life satisfaction and happiness. Results indicate that there were significant relationships between mental health and academic stress (0.55**), life satisfaction (-0.58**) and happiness scores (-0.65**). Correlation coefficients between academic stress and life satisfaction (-0.60) and happiness (-0.59) are also significantly high. Correlation coefficient between life satisfaction and happiness is 0.72.

Table-4 is showing F value significant for academic stress, life satisfaction, and happiness ($F = 45.51$, $P < 0.001$). In other words it can be stated with a 99% confidence that academic stress, life satisfaction, and happiness can be the predictors of mental health among students.

In table-5 the coefficient of determination in 3rd model is come out to be 0.58, R square= 0.36, adjusted R= 0.28 and significant F change= 0.001. Thus it can be opined that 46% of the low mental health prediction among students can be made by academic stress, life satisfaction and happiness.

Likewise table-6 showed that the beta confidence (β) represents academic stress (0.32), life satisfaction (0.36) and happiness (-0.35) are good predictors of low mental health among students. Student hood is an important phase of an individual's life and a good mental health may serve as a bridge to reach the expectations of self as well as society. In student life an Individual may realize his/her full potential and explore interests to satisfy his/her curiosity and excel. For the fuller utilization of this stage a good mental health plays an important role.

V. CONCLUSION

The present research concludes that the students who have not willingly chosen their academic stream and are not satisfied with it suffer poor mental health, and academic stress. They are less satisfied with their life and also they are less happy as compare to the students who have willingly chosen their academic stream and satisfied with it. The study indicates that willingness in choice of career plays a major role in individual's life. It may facilitates or adversely affect the overall wellbeing of the people. Current study also revealed that male students enjoy good mental health and are happier as compare to the female students. Results are supported by the

previous researches also (Parthi & Rohilla, 2017a, 2017b; Rohilla, 2017).

School years are the period of foundation for the whole life of an individual. The dissatisfaction with academic streams may ruin the entire career of the student. In order to make an individual expert in their respective fields, it is very essential to let the students explore their potential and give freedom to pursue the academic stream of their own choice.

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