

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

Krishan Kumar Panchal^{1*}, Dr. Poonam Tewari², Dr. Sudhir Kumar Singh³

ABSTRACT

The purpose of this research paper was to measure the relationship between self-esteem, life satisfaction, and general health among college student smokers and non-smokers. The study quantitatively used data from different educational institutes and colleges in the Faridabad – Haryana, India area using simple random sampling. The sheet for Personal Information, General Health Questionnaire-12 (GHQ-12) (Goldberg and Williams, 1978), Self-Esteem Inventory (SEI) (Coopersmith, 1967), and Life Satisfaction Scale (LSS) (Alam and Srivastava, 2001) were used among 207 college students, out of which 97 were smoker participants. The results of this study indicate that non-smoker and smoker groups have a similar level of general health. Non-smoker and smoker participants are at almost equal levels of life satisfaction. The findings provide evidence that total self-esteem is a very strong predictor of general health among the non-smoker group. Social satisfaction and total self-esteem are strong predictors of general health among the smoker group.

Keywords: *General Health, Self- Esteem, Life Satisfaction, Smoker, Non-Smoker, Faridabad-Haryana India*

The Indian Council of Medical Research (2020) reported that tobacco-related cancers constituted 27% of India's cancer burden. India ranks second globally in tobacco consumption, with almost 29% of adults using tobacco, trailing only China. This high prevalence translates into a staggering annual death toll of approximately 13.5 lakh preventable deaths. Smokers are twice as likely as non-smokers to develop signs of mental illness (Farrell et al, 2001). Even though evidence suggests a causal link between mental disorders and smoking behaviour, it is argued that a reverse relationship can also occur (West and Jarvis, 2005). Further, it has been found that smoking among adolescents preceded the onset of depression and other affective disorders. Approximately 2 billion people worldwide use tobacco products, mostly in the form of cigarettes, with tobacco smoking-related diseases resulting in 4 million deaths per year (DeMarini, 2004). Abid et al. (2022) found high depression rates among male University of Karachi students, associating it with smoking. Their cross-sectional study highlighted significant smoking burdens among students. Gwon et al. (2022) analyzed 2015 Behavioral Risk Factor Surveillance System data to explore mental health and sleep quality associations based on smoking status. Their

¹Ph.D. Scholar, Dr. Bhimrao Ambedkar University, Agra (U.P.), India

²Assistant Professor, Department of Psychology, Raja Balwant Singh College, Agra (U.P.), India

³Professor, Department of Psychology, Raja Balwant Singh College, Agra (U.P.), India

*Corresponding Author

Received: April 07, 2024; Revision Received: June 27, 2024; Accepted: June 30, 2024

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

study revealed significant relationships between mental health problems and poor sleep days. Lawrence et al. (2022) examined the relationship between mental disorders and smoking in Australian adolescents, finding a stronger association, especially in females. The study emphasizes the importance of addressing smoking among adolescents with mental disorders, particularly females. Linli et al. (2022) discovered smoking's link to poorer cognition, partially mediated by BrainAge Gap, offering insight into smoking, brain aging, and cognition, which can inform more acceptable anti-smoking messaging.

Szinay, D et al. (2019) aimed to investigate whether self-esteem is associated with smoking status and alcohol consumption in a large sample of adults in the United Kingdom after adjusting for age, sex, socio-economic status and depressed mood. Cross-sectional correlational study conducted under the aegis of the British Broadcasting Corporation (BBC) between 2009 and 2013. Lower self-esteem appears to be positively associated with ever- and current smoking and excessive alcohol consumption and negatively associated with current alcohol consumption.

Wan, B et al. (2022) investigated SHSE effects on self-satisfaction indices related to depression in university students. Data from 740 nonsmoking students in 2018, with 57.84% exposed to secondhand smoke, were analyzed. The study highlights SHSE's significance and its impact on university students' mental health, suggesting targeted preventive measures on campuses. Joffer, J et al. (2014) the aim of this study was to examine predicting factors in early adolescence for smoking in late adolescence. The study stresses the importance of strengthening adolescents' self-esteem, promoting anti-smoking attitudes in early adolescence, as well as avoidance of early initiation of snus. Such measures should be joint efforts involving parents, schools, youth associations, and legislating authorities.

Rationale of the study

Smoking is the most preventable health dilemma in the world. The younger generation is fond of smoking. Psychological factors play an important role in smoking. These factors are the key point of present study. So, we selected general health, self –esteem and life satisfaction as psychological factors for further investigation. Smoking has a negative impact on mental health. Many people with mental health problems are more likely to smoke. Many previous studies have reported that smoking behavior is associated with poor mental health. Self –esteem is directly linked with smoking. Self –esteem has been shown to differentiate between smokers and non –smokers such that smokers tend to have lower self –esteem than non –smokers. Smoking also affects the satisfaction of life. Smokers presented a lower life satisfaction than non –smokers. The college students are selected as population for the present study because young adults have the highest smoking rate of any age group.

There is an extensive literature in western countries regarding the above said variable, but in India, there is a dearth of literature, which encompasses these variables. There is a paucity of research in this area while taking all these all these variables especially in the Indian setting.

Objectives

- To compare smoker and non –smoker group on general health, self –esteem and life satisfaction.
- To find out the predictors of general health among smoker and non –smoker groups.

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

Hypotheses

- Smokers have poor general health as compared to non –smokers.
- Self –esteem of non –smoker group would be high as compared to the smoker group.
- Smokers are likely to be low on life satisfaction as compared to non –smokers.
- Some of the variables of self –esteem and life satisfaction would predict general health among smokers and non –smokers.

METHODOLOGY

Sample

The sample for the present study consisted of 207 college students out of which 97 participants were smokers. The sample was selected from different educational institutes and colleges of Faridabad (Haryana) INDIA area using simple random sampling. Further, this sample was divided into two groups, on the bases of identification of smoker and nonsmoker habits with the help of a self constructed questionnaire. The age of the participants ranged from 20 to 28 years with the mean age 24 years. The representative sample consisted of participants from all walks of life.

Instruments

The details of tools used in the present study are as follows:-

1. Sheet for Personal Information
2. General Health Questionnaire-12 (GHQ- 12) (Goldberg and Williams,1978)
3. Self- Esteem Inventory (SEI) (Coopersmith, 1967)
4. Life Satisfaction Scale (LSS) (Alam and Srivastava, 2001)

1. Personal Information Sheet

To categorize the participants into smoker and non –smoker groups, a self constructed questionnaire was used. This questionnaire is based on characteristics of smokers and non –smokers describe by two organizations i.e. Centers for Diseases Control and Prevention (CDC) (2002) and World Health Organization (WHO) (2013). The questionnaire consists of questions regarding smoking behavior. On bases of responses of participants, they were classified as smoker or non –smoker. The main criteria is “Respondents who reported at least 100 cigarettes in their lifetime were defined as smokers and who reported never having smoked 100 cigarettes were defined as “non –smoker”.

2. General Health Questionnaire-12 (GHQ- 12) (Goldberg and Williams, 1978)

The General Health Questionnaire (GHQ) was developed by Goldberg and Williams (1978) in England as a self-administered screening instrument to identify psychological distress for use in general population surveys, or among general medical outpatients. It was designed to cover four identifiable elements of distress: depression, anxiety, social impairment and hypochondria. The questionnaire was originally created as a 60-item instrument. Shortened versions (30, 28, 20 and 12 items) were developed from the original.

The 12-items version, due to its brevity, is probably the most popular and so, has been extensively evaluated in terms of its validity and reliability as a one dimensional indicator of the severity of psychological morbidity. Respondents had to indicate, on a -points scale anchored with (1) less than usual, (2) no more than usual, (3) rather more than usual, (4) much more than usual how frequently they experienced the different symptoms listed on the scale. The general version of the scale does not precise to participants any context in which

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

the symptoms have been experienced. Each item is rated on a four-point scale, using one of two most common scoring methods: dichotomous (0-0-1-1) or Likert-like type (0-1-2-3).

The reported Cronbach alpha coefficient for the GHQ is a range of 0.82 to 0.86. The instrument is considered as reliable and has been translated into 38 different languages. The split-half reliability computed on the 853 completed questionnaires was 0.95.

Validity of the instrument was performed using convergent validity. When the correlation between the GHQ-12 and global quality of life scores was investigated, as expected a significant negative correlation emerged ($r = -0.56$, $P < 0.0001$) indicating that those who were more distressed showed lower levels of global quality of life (Montazeri et al., 2003).

The GHQ-12 showed good structural characteristics and was appropriately correlated with other measures of related traits. Overall, the GHQ-12 appears to be a valid index of psychological wellbeing in this population and was considerably shorter than some of the other instruments (Tait et al., 2003).

3. Self- Esteem Inventory (SEI) (Coopersmith, 1967)

The Self-Esteem Inventory (SEL) (Coopersmith, 1967) was designed to assess one's general attitudes toward the self in social, academic, family and personal area experience. The SEI is a 58-item asking whether a statement is similar or dissimilar to the tester's personality. For each item, participants answer whether the statement provided is "like me" or "not like me". If the statement does not describe how participants usually feel, put an X in the column "Unlike Me." by participant. There are no right or wrong answers. The inventory constitutes the lie scale. The lie scale items (26, 32, 36, 41,45,50,53 and 58) are always scored separately; that is responses to these items should never be included in the self – esteem score. To score the scale, award one point for each lie score item answered "like me."

The four subscales of the SEI may be scored separately. The items corresponding to each subscale are given below:

General Self's items –

1,3,4,7,10,12,13,15,18,19,24,25,27,30,31,34,35,38,39, 43,47,48,51,55,56,57,

Social Self-Peer's items-5, 8,14,21,28,40,49,52

Home-Parent's items-6, 9,11,16,20,22,29,44,

School Academic's items -2,17, 23, 33, 37,42,46,54

Spatz and Johnston (1973) administered the SEI to over 600 students in grades 5,9 and 12 in a rural school district. From each grade, 100 inventories were selected, and Kuder – Richardson reliability estimated (KR20s) were calculated. Obtained coefficients are .81 for grade 5, .86 for grade 9, and .80 for grade 12. The coefficients indicate adequate internal consistency for students in all three grades. Fullerton (1972) reported a split- half reliability coefficient of .87 for 104 students in grades 5 and 6. Simon and Simon (1975) correlated the SEI and SRA Achievement Series Score of eighty- seven children in grade 4 and obtained a coefficient of .33($p < .01$). The children's SEI scores were also correlated with their scores on the Lorge Thorndike Intelligence Test. The obtained coefficient was .30. Regression analysis of SEI subscale scores on MAT GES (Donalson, 1974) indicated that the SEI is generally the best predictor. Correlations of SEI subscale scores with reading GES (N=643) scores were as follows: General Self subscale, .35; Lie Scale, .39; Lie Scale and General Self subscale multiple r , .53 ($p < .01$).

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

4. Life Satisfaction Scale (LSS) (Alam & Srivastava, 2001)

The Life satisfaction Scale (LSS) is a measure of life satisfaction developed by Alam and Srivastava (2001). The scale taps six dimensions of life satisfaction i.e. health, personal, economic, social and job satisfactions (Total 60 items). The responses are to be given in yes/no. Yes, responses indicate satisfaction. There is no time limit yet it takes about 20 minutes to complete the questionnaire. The scale can be used on individuals between the ages 18 to 40 years.

Test-retest reliability was computed after a lapse of 6 weeks. The obtained quotient was .84. The validity of the scale was obtained by correlating it with Saxena's Adjustment Inventory and Srivastava Adjustment Inventory. The quotient obtained was .74 and .82 respectively. Further the scale has face validity as all the items are closely related to the covered areas. The items were judged by the experts. The psychometric properties of LSS are found to be highly satisfactory.

Procedure

For the study, the sample was taken from different colleges randomly. The participants were approached and contacted in their free hours as per convenience. They were told in detail the purpose of the research. Their willingness to participate in the research was sought after seeking their consent. Then a suitable time for assessment was fixed. In the pre- screening, a self-constructed questionnaire was used to categorize the participants as smoker and non – smoker. Then a small group of 7 participants each was formed and further testing was done. As all the tests can be done within one hour, so the whole testing was completed in one session only. The assessment was done in a noise- free room without much external distraction. They were ensured that their results will remain confidential, so they must respond without any hesitation. They are not allowed to talk or share their opinion on any statement with each other. After the test were collected. It is ensured that no question should be left unmarked. The instructions and administration procedures were the same for all the participants and in accordance with that described by the test author. Scoring of the data was undertaken manually with the help of stencils as per their respective manuals.

Statistical Analyses

Results of participants' assessments were recorded in a spreadsheet and transferred to the Statistical Package for Social Sciences (SPSS) version 16.0 for Windows. SPSS is used for in-depth analyses. The data were analyzed by using descriptive and inferential statistics and multiple regression analysis.

RESULTS

Descriptive Statistics

To compare the non- smoker group with smoker group on the measures of self- esteem and life satisfaction, t- test was applied. Table 2 shows the mean scores, standard deviation and t- ratio of the non- smoker and smoker college student groups of all the variables. A review of Table 2 reveals that out of the thirteen variables, the difference is occurring on nine variables. Out of these variables, significant differences in.01 level are found on five variables, while the significant differences in.05 level are found in the remaining four variables.

The mean of the non- smoker group on the general health variable is 2.45, whereas it is 2.25 in the smoker group. SD of the non- smoker group is 2.03 as compared to 2.2 of the smoker

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

group on this variable. The t- value for general health variable is .67 which is not significant. The results show that non- smoker and smokers do not differ on general health.

On General Self-Esteem (GEN), which is a variable of Self-Esteem (SEI), the mean and SD of the non- smoker group these are 14.12 and 3.39 respectively whereas these 13.16 and 3.54 for the smoker group. The t-value for this variable is 1.98 which is significant at .05 level. The results show that the non- smoker group is higher on general self- esteem as compared to the smoker group.

Table 1 List of Variables with their Code Name

S. No.	Code Name	Variables
1.	GHQ	General Health Questionnaire or General Health
2.	LSS	Life Satisfaction Scale or Life Satisfaction
3.	SEI	Self –Esteem Inventory or Self- Esteem
4.	SmKR	Cigarette Smoker or Smoker
5.	NSM	Non- Smoker
6.	GEN	General Self or General Self- Esteem
7.	SOC	Social Self or Social Self- Peers Esteem
8.	H	Home- Parents or Home –Parents Self- Esteem
9.	SCH	School/College Academic Self- Esteem
10.	TOTSE	Total Self - Esteem
11.	HS	Health Satisfaction
12.	PS	Personal Satisfaction
13.	ES	Economic Satisfaction
14.	MS	Marital Satisfaction
15.	SS	Social Satisfaction
16.	JS	Job Satisfaction
17.	TOTLS	Total Life Satisfaction

Table 2 Mean, Standard Deviation (SD), and t - ratio for both Non- Smoker and Smoker Groups

Variables	Non-Smoker (n=110)		Smoker (n=97)		t-ratio	Significance Level (p)
	Mean	SD	Mean	SD		
General Health						
GHQ	2.45	2.03	2.25	2.2	0.67	NS
Self-Esteem						
GEN	14.12	3.39	13.16	3.54	1.98	.05
SOC	4.4	1.62	4.07	1.56	1.48	NS
H	4.52	1.71	4.01	1.7	2.14	.05
SCH	4.99	1.57	4.19	1.82	3.42	.01
TOTSE	28.03	5.88	25.43	5.69	3.22	.01
Life Satisfaction						
HS	5.73	1.53	5.23	1.56	2.33	.05
PS	6.55	1.49	5.96	1.81	2.56	.05

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

ES	4.01	1.59	4.76	1.48	3.51	.01
MS	3.11	2.54	3.4	2.93	0.77	NS
SS	8.22	1.56	7.09	1.61	5.29	.01
JS	4.41	2.01	5.72	1.74	4.99	.01
TOTLS	32.02	6.48	32.16	5.41	0.18	NS

No difference is shown in Social Self Peers- Esteem (SOC). The mean and SD of the non-smoker group on the SOC variable has come out to be 4.4 and 1.62 respectively, whereas in the smoker group the mean is 4.07 and SD is 1.56. The t-value for the SOC variable is 1.48, which is not significant. This shows that non –smoker and smoker groups are more or less at the same level of social self peers -esteem.

On Home- Parents (H) Self- Esteem, mean and SD of the non- smoker group on this variable are 4.52 and 1.71 respectively, whereas these are 4.01 and 1.7 in the smoker group. The t-value for this variable is 2.14, which is significant at .05 level. The results show that the non- smoker group is higher on self- esteem regarding home- parents than the smoker group. We can say that the non- smoker group has better family self- esteem as compare to smoker group.

Furthermore, a statistically significant difference is found on the School/college Academic Self- Esteem (SCH) between non -smoker and smoker groups. The mean and SD for the non- smoker group is 4.99 and 1.57 respectively, and the smoker group mean and SD are 4.19 and 1.82 respectively. The t-ratio of 3.42, which is significant at .01 level. This indicates that the non- smoker group has higher on school/college academic self- esteem than the smoker group.

On the way, a statistically significant difference is found on the Total Self- Esteem score (TOTSE). The mean and SD for non- smoker group is 28.03 and 5.69 respectively, for smoker group, the mean and SD is 25.43 and 5.69 respectively. The t-ratio is 3.22, which is significant at.01 level. This shows that non-smoker group higher on total self- esteem as compared to their smoker group counterparts. In other words, non- smoker group is better on total self- esteem than the smoker group.

Participants are then compared with the score of the six domains of life satisfaction, viz. Health Satisfaction (HS), Personal Satisfaction (PS), Economic Satisfaction (ES), Marital Satisfaction (MS), Social Satisfaction (SS) and Job Satisfaction (JS) along with the scores of overall Total Life Satisfaction (TOTLS).

Beside on the Total Life Satisfaction score (TOTLS) of the participants, significant differences are found on five out of the six domains of life satisfaction.

On the variable Home Satisfaction (HS), the mean and SD for non- smoker group is 5.73 and 1.53 respectively. For smoker participants, the mean and SD is 5.23 and 1.56 respectively. The t- ratio is 2.33, which is significant at.05 level. This reflects that the non-smoker group has higher home satisfaction as compared to the smoker group.

On the other hand, on the variable Personal Satisfaction (PS), the mean and SD for the non-smoker group is 6.55 and 1.49 respectively. For smoker group, the mean and SD is 5.96 and

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

1.81 respectively. The t-ratio has come out to be 2.56, which is significant at 0.5 level. This shows that non- smoker participants are more personally satisfied than smoker participants. The mean of non- smoker participants on the Economic Satisfaction (ES) variable is 4.01 whereas it is 4.76 for smoker participants, SD of non- smoker participants are 1.59 as compared to 1.48 smoker participants on this variable. The t-ratio for ES is 3.51 which is an extremely statistically significant difference at.01 level. The results show that the smoker group is higher on economic satisfaction as compared to non- smoker counterparts.

In addition, no difference is found on the Marital Satisfaction (MS) variable. The mean and SD for non- smoker group is 3.11 and 2.54 respectively, and for the smoker group mean and SD is 3.4 and 2.93 respectively. The t-ratio for MS is 0.77, which is not significant. This indicates that non- smoker and smoker groups do not differ significantly on MS variable. As the samples for the study includes only college students and most of them are unmarried this insignificant difference may be because of this.

Statistically significant difference is found in the Social Satisfaction (SS) score. The non-smoker participants have a mean of 8.22 and SD of 1.56, whereas smoker participants have a mean of 7.09 and SD of 1.61. The t-ratio has come out to be 5.29, which is significant at.01 level. This shows that non- smoker group is more socially satisfied than smoker group.

On the Job Satisfaction (JS) variable, mean score for non- smoker group is 4.41 and SD is 2.01as compared to the mean of 5.72 and SD of 1.74 for smoker group. The t-ratio is 4.99, which is again significant at .01level. This indicates that in comparison to smoker participants, non- smoker have lower job satisfaction. More studies are required to find whether non- smoker have a really lower level of job satisfaction as compared to smokers. Lastly, no statistically significant difference is found on the overall score in total Life satisfaction. The mean for non- smoker participants is 32.0 with SD of 6.48, whereas for smoker participants the mean is 32.16 and SD is5.41. The t-ratio is 0.18, which is non-significant. This reflects that non- smoker and smoker participants are almost at an equal level of their life satisfaction.

Multiple Regression Analysis

Table 3 Summary of Stepwise Multiple Regression (Non- Smoker Group)

Dependent Variable: General Health

Step	Variables	R	R ²	df	F	p
1	Total Self- Esteem	.20	.04	1/108	4.33	.05

Table 4 Summary of Stepwise Multiple Regression (Smoker Group)

Dependent Variable: General Health

Step	Variables	R	R ²	df	F	p
1	Total Self- Esteem	.35	.12	1/95	12.80	.001
2	Social Satisfaction	.43	.18	1/94	10.52	.001

In the present study, stepwise regression analysis is applied while taking General Health as a dependent variable in both groups i.e. non- smoker group and smoker group. Table 3 shows the results of stepwise regression analysis for the dependent measure General Health in a sample of non- smokers. Total Self- Esteem being the most potent predictor of General Health which entered the equation in step one. The multiple R for this variable equal to .20

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

and R^2 is .04. For the F of this variable being 4.33, it is significant at .05 probability level. It indicates that Total Self – Esteem is a very strong predictor of General Health among non-smokers. This predictor accounts for 04 % ($R = .04$) of total variance.

The results of stepwise regression for the dependent measure General Health for Smokers are presented in Table 4. A perusal of these results indicates that the analysis results of stepwise accepted only two variables, which made a significant contribution towards the prediction of General Health among smokers.

Total Self- Esteem became the most potent predictor of General Health as it entered the equation in step one. The R for this variable equal to .35 and R^2 .12, F-to-enter being 12.80, it is significant at .001 probability level. It indicates that total Self- Esteem appropriately predicts General Health among smokers. Social Satisfaction (SS), a variable of Life Satisfaction which entered the equation in step two, With the entry of this variable, the R increases to .43 and R^2 .18, F –to-enter being 10.52, which is significant at .001 probability level. It indicates that Social Satisfaction is also a strong predictor of General Health among smokers. The results show that total Self- Esteem and Social Satisfaction jointly account for 18% ($R^2 = .18$) of the total variance of General Health among smokers.

DISCUSSION

The findings of the study are revealing and interesting in many respects. The present study was conducted to examine the differences between smoker group and non –smoker group on general health, self –esteem and life satisfaction. Young adults have the highest smoking rate of any age group. So, the present study population was young i.e. college students. One of the findings of the present study is no difference found on general health among smokers and non –smokers. So the hypothesis regarding difference in general health among smokers and non –smokers is rejected. Through earlier studies pointed out that there is difference between smokers and non –smokers on general health (Faith et al., 2013; Kord et al., 2012; Lawrence et al., 2010; Primack et al., 2013; Repetto et al., 2005; Synder, 2006). So, more studies are required to examine the difference between these groups.

Self –esteem have been shown to be an important risk factor for young smokers. This in mind, the second hypothesis was stated that self –esteem of the non – smoker group would be high as compared to smoker group. This assumption was confirmed by present study finding that non –smokers are higher on self –esteem than smoker. Similar findings have also been observed in other studies (Carters et al., 2013; Engels et al., 2005; Kawabata et al., 1999; Li et al., 2010; Saari et al., 2015; Shaniya & Sharma, 2012; Srivastava, 2015).

The third hypothesis of the study stated that smokers are likely to be low on life satisfaction as compared to non –smokers. Non –smokers and smokers are at almost equal level of their life satisfaction. So, the hypothesis regarding life satisfaction is rejected. The finding of the present study is contradictory to earlier study (Shaniya & Sharma, 2012).

The last objective of this study was to find out the predictor of general health among smoker and non –smoker groups. We hypothesized that some of variables of self –esteem and life satisfaction would predict general health among smokers and non –smokers. In order to test this hypothesis stepwise multiple regression model was used, while taking a general health as a dependent variable in smoker and non –smoker groups. While deciding what variables to include in the model, previous research was taken into account. Results from the

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

regression model indicate that self –esteem as very strong predictor of general health among non –smokers, accounting for 18% of the variance. These results correspond with research findings (Abernathy et al., 1995; Cythia et al. 2014; Kim, 2004; Li et al., 2010). The findings of the present study that social satisfaction and self –esteem are strong predictors with 04% joint accountability of total variance among the smoker group. No similar studies have been found by researcher to confirm this finding. So, more rigorous studies are required to confirm these finding in Indian context.

Main Finding of The Study

- Non –smoker and smoker groups having level of similar general health.
- Non –smokers are better on variables general self –esteem, family self –esteem, school/college academic self –esteem as compared to their smoker counterparts. Non –smokers are higher in total self –esteem than smokers.
- Non –smoker and smoker groups do not differ on the dimensions, i.e. social self-peers –esteem and marital satisfaction.
- Non –smokers having a higher level of home, personal and social satisfactions than smokers.
- Smokers are higher on economic and job satisfactions as compared to the non –smokers.
- Non –smoker and smoker participants are at almost equal level of their life satisfaction.
- Total self –esteem is a very strong predictor of general health among non –smoker group with 18% ($R^2=.18$) accountability of total variance.
- Social satisfaction and total self –esteem are strong predictors of general health among smoker group with 04% ($R^2=.04$) joint accountability of total variance.

REFERENCES

- Abernathy, T.J., Massad, L., & Romano-Dwyer, L. (1995). The relationship between smoking and self-esteem. *Adolescence*, 30(120), 899-907.
- Abid, Z., Ramzan, M. A., Sheroze, M. W., Jamal, K., Batool, R., & Mazher, S. (2022). Prevalance of Depression and Its Association with Cigarette Smoking among Undergraduate Students; A Cross-Sectional Study from Karachi. *Journal of Medical Research and Health Sciences*, 5(2), 1786-1790.
- Alam, Q.G. & Srivastava, R. (2001). *Manual for Life Satisfaction Scale*. Agra, India: National Psychological Corporation.
- Carters, M. A., & Byrne, D. G. (2013). The role of stress and area-specific self-esteem in adolescent smoking. *Australian Journal of Psychology*, 65, 180–187.
- Centers for Disease Control and Prevention (CDC). (2002). *Morbidity and Mortality Weekly Report*, 51, 300-303. Washington DC: Department of Health and Human Services (HHS).
- Coopersmith, S. (1967). *Self –Esteem Inventories*. California: Consulting Psychologists Press, Inc.
- Cynthia, S. W., Ho, T.W., Carmen H.M. S., & Alice, Y. L. (2014). Multi-dimensional self-esteem and substance use among Chinese adolescents. *Substance Abuse Treatment, Prevention, and Policy*, 9, 42.
- DeMarini, D.M. (2004). Genotoxicity of tobacco smoke and tobacco smoke condensate: A review. *Mutation Research*, 567(2-3), 447-474.

**Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student
Smokers and Non-Smokers**

- Donaldson, T.S. (1974). *Affective Testing in Alum Rock Voucher School*. Santa Monica, California: Rand Corporation.
- Engels, R.C.M.E., Hale, W.W., Noom, M., & DeVaies, H. (2005). Self –Efficacy and Emotional Adjustment as Precursors of Smoking in Early Adolescence. *Substance Use & Misuse*, 40(12), 1883-1893.
- Faith, B.D., Airon, Y., Arlene, D., Gerald, J.J., Joseph, V. G., Jeanne, C.,...Gail, L. D. (2013). Cigarette Smoking and Health Characteristics in Individuals with Serious Mental Illness Enrolled in a Behavioral Weight Loss Trial. *Journal of Dual Diagnosis*, 9(1), 39-46.
- Farrell, M., Howes, S., Bebbington, P., Brugha, T., Jenkins, R.,... Lewis, G. (2001). Nicotine, alcohol and drug dependence and psychiatric comorbidity. Results of a national household survey. *British Journal of Psychiatry*, 179,432-437.
- Fullerton, W.S. (1972). *Self- disclosure, Self-esteem and Risk taking: A Study of their Convergent and Discriminate Validity in Elementary School Children* (Unpublished Doctoral dissertation). University of California, Berkeley.
- Goldberg, D., & Williams, P. (1978). *A User's Guide to the General Health Questionnaire*. London: nferNelson Publishing Company Ltd.
- Gwon, S. H., Cho, Y. I., Lee, H. J., Paek, S., & Matthews, P. A. (2022). Moderating Effects of Smoking Status on the Relationships Between Mental Health Problems and Poor Sleep. *SAGE Open*, 12(1), 21582440221082140.
- ICMR (2020). Cancer research in ICMR. <http://www.icmr.nic.in>.
- Joffer, J., Burell, G., Bergstrom, E., Stenlund, H., Sjors, L., & Jerden, L. (2014). Predictors of smoking among Swedish adolescents. *BMC public health*, 14(1), 1-9.
- Kawabata, T., Cross, D., Nishioka, N., & Shimai, S. (1999). Relationship Between Self-Esteem and Smoking Behavior Among Japanese Early Adolescents: Initial Results from a Three-Year Study. *Journal of School Health*, 69(7), 280–284.
- Kord, T. B., Raghobi, M., & Bakhshani, N.M. (2012). A study of mental health and dyadic adjustment between smokers and nonsmokers. *International Journal of High Risk Behaviors and Addiction*, 1(2), 55-60.
- Kim, Y.H. (2004). Psychological constructs to predicting smoking behavior among Korean secondary school students. *Preventive Medicine*, 38(5), 620-627.
- Lawrence, D., Mitrou, F., Sawyer, M.G., & Zubrick, S.R. (2010). Smoking status, mental disorders and emotional and behavioural problems in young people: child and adolescent component of the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 44(9), 805-814.
- Lawrence, D., Johnson, S. E., Mitrou, F., Lawn, S., & Sawyer, M. (2022). Tobacco smoking and mental disorders in Australian adolescents. *Australian & New Zealand Journal of Psychiatry*, 56(2), 164-177.
- Li, X., Mao, R., Stanton, B., & Zhao, Q. (2010). Parental, Behavioral, and Psychological Factors Associated with Cigarette Smoking among Secondary School Students in Nanjing, China. *Journal of Child and Family Studies*, 19, 308-317.
- Linli, Z., Feng, J., Zhao, W., & Guo, S. (2022). Associations between smoking and accelerated brain ageing. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 113, 110471.
- Montazeri, A., Harirchi, A. M., Shariati, M., Garmaroudi, G., Ebadi, M., & Fateh, A. (2003). The 12-item General Health Questionnaire (GHQ-12): Translation and Validation Study of the Iranian version. *Health and Quality of Life Outcomes*, 1, 66.

Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers

- Primack, B.A., Land, S.R., Fan, J., Kim, K.H., & Rosen, D. (2013). Associations of Mental Health Problems with waterpipe Tobacco and Cigarette Smoking Among College Students. *Substance Use & Misuse*, 48(3), 211-219.
- Repetto, P.B., Caldwell, C.H., & Zimmerman, M.A. (2005). A Longitudinal Study of the Relationship Between Depressive Symptoms and Cigarette Use Among African American Adolescents. *Health Psychology*, 24(2), 209-219.
- Saari, A.J., Kentala, J., Mattil, K.J. (2015). Weaker Self-Esteem in Adolescence Predicts Smoking. *BioMed Research International*, 687541(2314-6141).
- Shaniya, P.M., & Sharma, M.K. (2012). Self- esteem and life satisfaction: Implications for adolescents tobacco use. *Delhi Psychiatry Journal*, 15(2), 372-374.
- Simon, W.E., & Simon, M.G. (1975). Self-esteem, Intelligence and Standardized Academic Achievement. *Psychology in the Schools*, 32, 97-100.
- Snyder, M. (2006). Serious Mental Illness and Smoking Cessation. *Issues in Mental Health Nursing*, 27(6), 635-645.
- Spatz, K., & Johnston. (1973). Internal consistency of the Coopersmith Self-esteem Inventory. *Educational and Psychological Measurement*, 33, 875-876.
- Srivastava, S. (2015). Locus of Control and Self -esteem Among Smoker and Non Smoker University Students. *Indian Journal of Applied Research*, 5(5), 19-20.
- Szinay, D., Tombor, I., Garnett, C., Boyt, N., & West, R. (2019). Associations between self-esteem and smoking and excessive alcohol consumption in the UK: A cross-sectional study using the BBC UK Lab database. *Addictive behaviors reports*, 10, 100229.
- Tait, R.J., French, D.J. & Hulse, G.K. (2003). Validity and psychometric properties of the General Health Questionnaire-12 in young Australian adolescents. *The Australian and New Zealand Journal of Psychiatry*, 37(3), 374-81.
- Wan, B., Peng-Li, D., Chen, J., Xu, P., Sun, D., Chen, Q., ... & Wang, Z. (2022). The effect of secondhand smoke exposure on self-satisfaction and perceived freedom of life choice. *Journal of American College Health*, 1-7.
- West, R., & Jarvis, M.J. (2005). Tobacco smoking and mental disorder. *Italian Journal of Psychiatry and Behavioral Sciences*, 15, 10-17.
- World Health Organization. (2013). *WHO Report on the Global Tobacco Epidemic, 2013, Contrary profile: India*. Retrieved from http://www.who.int/tobacco/surveillance/policy/country_profile/ind.pdf

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Panchal, K.K., Tewari, P. & Singh, S.K. (2024). Self-esteem and Life Satisfaction as Predictors of General Health: A Study of College Student Smokers and Non-Smokers. *International Journal of Indian Psychology*, 12(2), 4452-4463. DIP:18.01.397.20241202, DOI:10.25215/1202.397