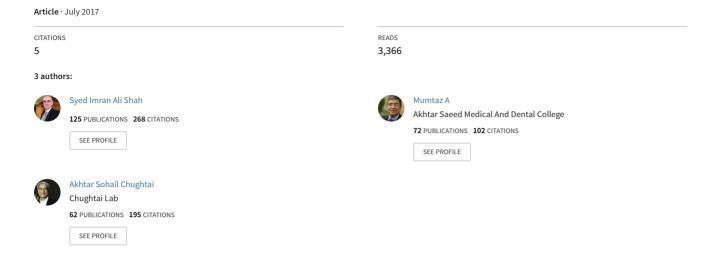
# Subjective Happiness and Academic Procrastination Among Medical Students: The Dilemma of Unhappy and Lazy Pupils



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# Subjective Happiness and Academic Procrastination Among Medical Students: The Dilemma of Unhappy and Lazy Pupils

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# **Abstract**

**Objective:** To investigate the frequency of subjective happiness and academic procrastination in medical students and determine their correlation.

**Methods:** In this cross-sectional study, medical students (n=191) at a private medical college were administered two psychological instruments namely subjective health assessment scale and procrastination scale. Frequencies of unhappiness and procrastination were determined as percentages. Mean scores were employed to group students into happy/unhappy and procrastinating/non-procrastinating. Gender-wise and correlational analyses were carried out using independent sample T-test and Pearson's correlation.

**Results:** High frequencies of unhappiness (46.59%) and procrastination (47.12%) were observed. No correlation was seen between the two parameters (Pearson's R= -0.040, p= 0.586). Gender-based analysis did not reveal any difference (mean subjective happiness score; males 4.48 vs. females 4.41, p = 0.698) (mean procrastination score; males 59.63 vs. females 59.13, p = 0.563).

**Conclusion:** Unhappy and procrastinating individuals constitute a major proportion of the medical student fraternity. Psychosocial measures need to be installed to facilitate affected students in overcoming such deficits.

Keywords: Medical Student, Procrastination, Happiness, Medical Studies

# INTRODUCTION

Medical studies are considered very intensive and students often feel overburdened with their academic commitments. The exhaustive medical courses and the pressure of doing well in exams contribute to general stress and anxiety among students [1,2]. More alarming is the fact that high rates of depression and suicidal tendencies have also been reported in medical students [3-5]. These strains have also been shown to negatively influence the academic performance, cognitive functioning and general well-being [6-8]. Stress and happiness have an inverse relationship and medical students hardly find any time to relax, rejoice and be

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happy. Lack of leisure activities aggravates the stressful state and medical students tend to be unhappy. Poor academic performance itself is a factor which contributes to the feelings of unhappiness and stress in medical student [9]. Furthermore, procrastination is one of the numerous identified determinants of unsatisfactory academic performance [10]. Defined as a needless and intentional delay in the performance of academic tasks such as studying, completing projects or submitting reports, academic procrastination has a prevalence ranging from 20%-90% in various educational set-ups [11,12].

Though much work has been done on identifying the psychological problems associated with medical studies [13-15], data on the state of happiness and attitude of procrastination in medical students are limited particularly in the loco-regional context. Medical students experiencing feelings of unhappiness due to the rigorous demands of their studies may tend to indulge in procrastination and time wastage on non-productive activities instead of focussing on academics. The goals of this study were to determine the occurrence of happiness and procrastination among medical students and to seek out any gender difference and relationship between the two parameters.

### **METHODOLOGY**

A cross-sectional study design was employed. The study was conducted in the latter half of the academic year 2015-2016. A total of 204 medical students studying at Central Park Medical College in the faculty of basic sciences (years 1 and 2) were approached of which 191 (93.6%) participated in the study. Study information was provided to students and informed consent was obtained. For assessing the study parameters, two validated instruments namely 'Subjective Health Assessment Scale' (SHS) and 'Procrastination Scale' (PS) were administered to the students in the paper form. Responses were collected in an anonymous manner. Demographic data including sex and age were also collected. Ethics approval for the study was obtained from Central Park Research Committee.

The validated instrument PS is a self-reported scale of procrastination that employs a five-point Likert scale. It comprises of 20 statements of which 10 are reverse-keyed (items 3, 4,6,8,11,13,14,15,18, and 20). Score for each respondent was computed by adding the ratings assigned to all items, after reverse coding of the 10 positively worded items [Table 1] [16]. Total score on this measure ranges from 20 to 100 with a higher score reflecting greater use of procrastination by the students and vice versa. PS has been demonstrated to have a high reliability [16].

The SHS is a validated self-reported measure of global subjective happiness that employs a seven-point Likert scale. It comprises of 4 items (item no.4 is reverse-keyed), 2 of which ask respondents to describe themselves using both absolute ratings and ratings relative to peers while other 2 items provide brief accounts of happy and unhappy individuals and ask respondents to mark the extent to which each description applies to them. Sum of the ratings allocated to all 4 items was calculated, after reverse coding of item no.4. [Table 2] [17]. Mean score was then computed which gave a single composite score. The score on this scale ranges from 1 to 7 with a higher score revealing greater happiness and vice versa. SHS has been shown to have high internal consistency and reliability [17].

# STATISTICAL ANALYSIS

Students' scores on the two administered instruments and demographic data analysed in an anonymised form using SPSS version 23.0 (SPSS Inc, Chicago, Illinois, USA). Age data were presented as range and mean. Mean + standard error of mean (SEM) of quantitative variables (SHS and PS scores) was calculated for all students combined as well as for males and females independently. Student categorization into happy/unhappy and non-procrastinating/procrastinating was done based on their individual scores on SHS and PS using the calculated means as cut-off values. Frequencies were expressed as percentages. Independent sample T-test was applied to observe mean differences between male and female students. Pearson's

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*Instructions:* People may use the following statements to describe themselves. For each statement, decide whether the statement is uncharacteristic or characteristic of you using the following 5-point scale. Note that the 3 on the scale is Neutral-the statement is neither characteristic nor uncharacteristic of you. In the box to the right of each statement, fill in the number on the 5-point scale that best describes you.

<b>Extremely Uncharacteristic</b>	<b>Moderately Uncharacteristic</b>	Neutral	<b>Moderately Characteristic</b>	<b>Extremely Characteristic</b>
1	2	3	4	5

- 1. I often find myself performing tasks that I had intended to do days before.
- 2. I do not do assignments until just before they are to be handed in.
- 3. When I am finished with a library book, I return it right away regardless of the date it is due.
- 4. When it is time to get up in the morning, I most often get right out of bed.
- 5. A letter may sit for days after I write it before mailing it.
- 6. I generally return phone calls promptly.
- 7. Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days.
- 8. I usually make decisions as soon as possible.
- 9. I generally delay before starting on work I have to do.
- 10. I usually have to rush to complete a task on time.
- 11. When preparing to go out, I am seldom caught having to do something at the last minute.
- 12. In preparing for some deadline, I often waste time by doing other things.
- 13. I prefer to leave early for an appointment.
- 14. I usually start an assignment shortly after it is assigned.
- 15. I often have a task finished sooner than necessary.
- 16. I always seem to end up shopping for birthday or Christmas gifts at the last minute.
- 17. I usually buy even an essential item at the last minute.
- 18. I usually accomplish all the things I plan to do in a day.
- 19. I am continually saying 'I'll do it tomorrow'.
- 20. I usually take care of all the tasks I have to do before I settle down and relax for the evening.

**Table 1:** Procrastination scale administered to the study participants (16).

<i>Instructions</i> : For each of the fappropriate in describing you.	Collowing state	ements and/or	questions, ple	ease circle the	point on the s	cale that you feel is most	
1. In general, I consider mysel	f:						
Not a very happy person						A very happy person	
1	2	3	4	5	6	7	
2. Compared to most of my peers, I consider myself:							
Less happy						More happy	
1	2	3	4	5	6	7	
3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To							
what extent does this characterization describe you?							
Not at all						A great deal	
1	2	3	4	5	6	7	
4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To							
what extent does this character		-	,	,			
Not at all						A great deal	
1	2	3	4	5	6	7	

**Table 2:** Subjective happiness scale administered to the study participants (17).

correlation was applied to observe correlation between SHS and PS scores. A p-value of <0.05 was considered statistically significant.

## **RESULTS**

The age range of all students (n=191) was 18-25 years with a mean age of 19.82 years. The age range of male students (n=83) was 18-25 years with a mean age of 20.06 years. The age range of male students (n=108) was 18-22 years with a mean age of 19.63 years.

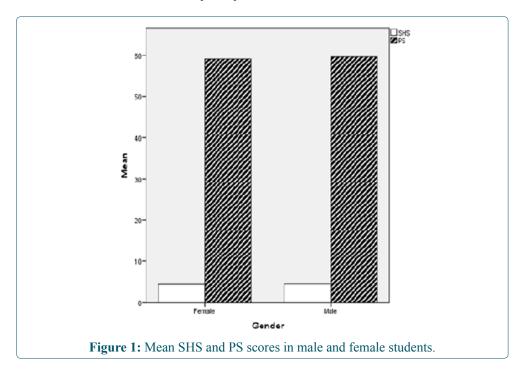
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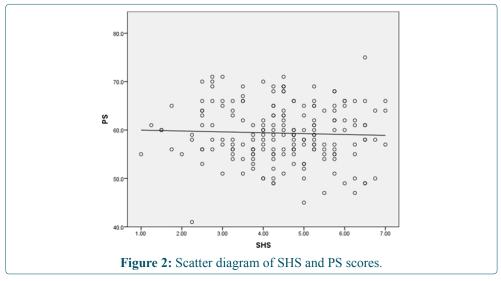


The range of SHS score for all students combined was 1-7 with a mean of 4.44. The range of SHS score for male students was 1.75-6.5 with a mean of 4.48. The range of SHS score for female students was 1-7 with a mean of 4.41. No significant difference in SHS scores was observed between male and female students (p=0.698) [Table 3, Figure 1]. The range of PS score for all students combined was 41-75 with a mean of 59.35. The range of PS score for male students was 47-71 with a mean of 59.63. The range of SHS score for female students was 41-75 with a mean of 59.13. No significant difference in SHS scores was observed between male and female students (p=0.563) [Table 3, Figure 1]. No significant correlation was observed between SHS and PS scores (Pearson's R=-0.040, p=0.586) [Figure 2].

Parameter	All students (n=191) Mean + SEM	Males students (n=83) Mean + SEM	Female students (n=108) Mean + SEM	p-value
SHS score	4.44 + 0.09	4.48 + 0.13	4.41 + 0.13	0.698
PS score	59.35 + 0.42	59.63 + 0.59	59.13 + 0.60	0.563

Table 3: Group comparisons of SHS and PS scores.





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Employing mean values as a cut-off, 89 of the total 191 students (46.59%) were classified as unhappy (as reflected by their low SHS scores) while 90 of the 191 students (47.12%) were categorized as procrastinators (as demonstrated by their high PS scores). Based on the SHS scores, 50 of the 108 female students (46.29%) and 39 of the 83 (46.98%) male students were shown to be unhappy. Based on the PS scores, 46 of the 108 female students (42.59%) and 44 of the 83 (53.01%) male students were shown to be procrastinators.

### **DISCUSSION**

Student burnout, anxiety, depression, suicidal inclinations and related complications are common problems faced by modern day medical students (2-8, 13-15). Feelings of unhappiness and dissatisfaction are key factors potentially resulting in these undesirable psychological ailments. Another problem afflicting medical students is procrastination which is essentially a deliberate avoidance of tasks that need to be completed on priority. Anxiety, reduced concentration and lack of attention are some of the known repercussions of such academic procrastination [10,11,18]. The present study explored the frequency of happiness and procrastination in male and female medical students.

Our results showed reduced levels of happiness in nearly half of the students based on a cut-off defined as the study population's mean SHS scores. However, the mean SHS score in our study was slightly lower than the SHS scores (4.63-5.07) for American college students as described by Lyubomirsky and Lepper [17]. Our results are in accordance with findings from a recent study on medical students in a Saudi Arabian medical university which revealed a high number (54.4%) of students as being unhappy. The mean SHS score in that study by Alshehri et al. [9] was 5.00 which is somewhat higher than our findings. Another recent study from Iran reported prevalence of low well-being in medical students at 30.7%. The Iranian study employed a different psychological instrument (World Health Organization-5 Well-Being Index) to assess the well-being status of students [18,19]. Comparison of our findings with previous work done elsewhere in the world signifies that the burden of unhappy students may be higher in local set-ups. Additionally, Alshehri et al. [9] identified multiple factors affecting the level of happiness among medical students including lifestyle, relationship status, socioeconomic condition and academic year. Their data showed final year class to have a higher percentage of unhappy students as compared to earlier years [9]. Thus, the low mean SHS score in our data set derived from first and second year medical students reinforces the point that more of the local medical students are unhappy even at earlier stages of their course.

The current study did not show any gender difference in the distribution of happiness in medical students which is in agreement with a recent report by Mortazavi et al. [19]. In an earlier study, Alshehri et al. [9] showed more females to be unhappy than males (56.77% females vs. 52.5% males) but the difference was statistically insignificant.

The current results show academic procrastination to be present in 47.12% of the students suggesting that a high proportion of our students indulge in non-productive activities at the expense of their academic commitments. Our data showed a higher preponderance of procrastination in males as compared to females but the gender-based analysis of PS scores did not reveal a difference. This is in congruence with a previous study in Pakistani university students by Saleem et al. [18] who did not find any gender difference on procrastination. Our results did not indicate any correlation between procrastination and subjective happiness which appears to be in contrast with recent work by Mortazavi et al. [19] who showed academic procrastination to be negatively correlated with well-being status of students. However, the psychological evaluation in that study was done using a different set of psychological instruments i.e. Solomon and Rothblum's Procrastination Assessment Scale [20,21] and World Health Organization-5 Well-Being Index [20].

The present study was limited by the small sample size which is a major hindrance to validity, reliability and generalization of these results. Furthermore, the cross-sectional

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design of the study did not allow for evaluation of a causal relationship between the studied parameters. An additional limitation was that the researcher had no control over the precision with which students filled in their responses.

#### **CONCLUSIONS**

The present study has informed of the common occurrence of subjective unhappiness and academic procrastination in medical students. More comprehensive future studies with a larger sample size need to be conducted to obtain further valuable insights into these phenomena. Such investigations should look at additional variables including self-esteem, anxiety, perfectionism and depression and identify their correlates. Procrastination by medical students could potentially compromise their academic quality. Moreover, the constant feeling of unhappiness can possibly have serious detrimental effects on the psychological health of students which in turn, could hamper their academic progress.

Medical education institutions should run screening programs for assessing happiness and procrastination. Student counselling should be instituted for affected individuals and students should be trained to overcome such negative personality attributes. Psychological interventions designed for mitigating these problems should be incorporated into the medical teaching framework.

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