

ANALYSIS OF PROCRASTINATION BEHAVIOUR AMONG TEACHERS: A NON-PARAMETRIC APPROACH

Sandeep Singh Banger

*Assistant Professor, Management, Punjabi University Regional Center for IT and Management,
Mohali, Punjab, India*

Ran Singh Dhaliwal (PhD)

*Professor & Head, Department of Tourism, Hospitality and Hotel Management
Punjabi University, Patiala, Punjab, India*

Rajni Bala (PhD)

Independent researcher, GNDU, Amritsar, India

Abstract

Procrastination behaviour in the academic realm holds many negative consequences, including lost time, increased stress, lower grades, poorer health, decreased long-term learning and lower self-esteem. The present study examined the tendency of procrastination among the teachers of different departments. The sample of 75 teachers, including assistant, associate and Professors was taken for research. Data was collected from teachers of Public Universities of Punjab (India). The sample was selected purely by convenience sampling technique. The teachers were selected from twelve different departments. The Pure Procrastination Scale (Steel, 2010) was used to conduct the research at Five Point Likert Scale. The reliability of scale was tested. One of the distinguishing feature of this research article is the use of non-parametric tests to analyze the data when data was deviated significantly from normal distribution. The relationship between demographic factors and procrastination was studied. The results revealed a significant impact of profile on the procrastination behaviour of the respondents. Further, age of respondents was found significantly correlated with the procrastination behaviour of the respondents. Finally, practical implications and limitations of the study were discussed.

Keywords: *Arousal, Avoidant, Decisional, Procrastination, Non – parametric tests.*

Introduction

Higher education system of India is the one of the largest system in the world as approximately 70 million students has been enrolled in the last two decades (IBEF, 2016). The role of the teacher is very important for a nation. A teacher is compared to a candle that burns itself in order to enlighten students. So, the performance of a teacher becomes a vital issue in this era. So, Performance of universities remains a center area for the researcher. Human elements have been studied from time to time by various researchers, directly or indirectly associated with organizational performance. It is evident that human behavior related elements like motivation, stress, leadership, attitude, burnout, personality, culture and procrastination etc. contributes to organizational performance. Baumeister & Scher, (1988) depicted procrastination as it as a lazy, self-indulgent habit of putting things off for no reason. The study showed that it was self-defeating behavior that lowered the quality of performance, because one ended up with less time to work. A competing tripartite model has divided procrastination into avoidance, arousal, and decisional (Steel, 2010). Avoidant procrastinators are those who have fear of failure and they avoid the tasks. And decisional procrastinators are those who can never make decisions

or delay decisions. Arousal procrastinators are those who complete or take action on the last movement.

Procrastination is the delaying of actions or tasks to a future time. The concept of procrastination is the delaying of a task that was originally planned despite expecting to be worse off for the delay (Van Eerde, 2003). Procrastination in the academic realm holds many negative consequences, including lost time, increased stress, lower grades, poorer health, decreased long-term learning and lower self-esteem. (Hoover, 2005). Procrastination can be defined as irrational delay of the behaviour. The fields of neuroscience and behavioral economics point to procrastination as an irrational delay, where we put off despite being worse off. Baumeister and Scher, (1988) depicted procrastination as it as a lazy, self-indulgent habit of putting things off for no reason.

Objectives of Study

1. To examine the level of procrastination behavior among the teachers.
2. To examine the relationship between demographic factors and procrastination behaviour of professional teachers.

Need for the Study

Procrastination is tendency of behavior which affects the performance of human being. There are various tasks of teachers like teaching, departmental activities, organizing events, research work, etc. So there is a need to check what type of procrastination is prevalent in Assistant Professors in order to accelerate smooth working of an organization. Further, when the data deviate from the normal distribution, then what type of methodology requires. Thus, the present study was an attempt to handle such types of situation.

Review of Literature

Milgram and Sroloff, & Rosenbaum (1988) correlated decisions and task avoidant procrastination with the personality traits. Sharma, (1997) found the determinants of task procrastination behavior at an actual workplace in an industrial organization and one of the three personal characteristics (frustration, tolerance) and four out of seven task characteristics (task ambiguity, deadline pressure, cooperation needed for completing the task, and feedback) were also found to be significantly related to task procrastination. Senecal et al. (2003) proposed and test a model of role conflict and academic procrastination. Steel (2007) reflected the correlation between procrastination and various personality traits further the significant relationship between age and procrastination explored. Takkar (2009) examined different theories on the reasons why students procrastinate on their academic assignments. Demos (2009) found a significant positive relationship between donations a sub dimension of altruism scale and perception of procrastination among the teachers. Erdinç (2009) examined the significant impact of gender on procrastination behaviour. Steel (2010) measured three types of procrastination name arousal, avoidant and decisional. The validity of the avoidance, arousal and decision model were reviewed here, the first meta-analysis and then factor analysis, using a large sample of respondents. Freeman et al (2011) showed that extraversion significantly predicted the engagement in procrastination. Fatimah, et al. (2011) explored that procrastination could be related to fear of failure can be lessened by competence expectancy and intrinsic motivation. Steel and Ferrari (2013) examined an association of procrastination with sex, age, marital status, education and nationality. Adu (2014) reveled the significant relationship between age and gender with procrastination. Khan et al. (2014) found the significant relationship between gender and procrastination. On the basis of previous literature following hypotheses were formulated:

- H₁: There would be a significant influence of gender on the procrastination level of respondents.

- H₂: There would not be a significant influence of the profile of respondents on procrastination.
- H₃: There would be a significant relationship between procrastination and age of respondents.
- H₄: There would not be a significant relationship between procrastination and experience of respondents.

The literature was supported to the H₁ and H₃ and the but the abundance of literature was not available for H₂ and H₄.

Research Methodology

The study was descriptive in nature. The sample of 75 teachers, including assistant, associate and Professors was taken for research. Data was collected from teachers of Public Universities of Punjab. The sample was selected purely by convenience sampling technique. The teachers were selected from twelve different departments. The Pure Procrastination Scale (Steel, 2010) was used to conduct the research at Five Point Likert Scale. There were 12 items in the scale. The three sub scales were as follows: (i) Decisional Procrastination: It is concerned with delay in decision- making. (ii) Arousal Procrastination: It is related to starting of work at the last moment (iii) Avoidant Procrastination: It is related to avoiding the task due to fear of failure. Cronbach's Alpha was used to test the reliability of the scale. The moderate level of reliability was found among the dimensions (Table 1). SPSS software was used for analysis of data. The average ages of respondents were 39.5 years and experience was 8.29 years. Most respondents were married (96%). The data were analyzed by non- parametric tests.

Dimension	Cronbach's Alpha	Number of Items
Decisional	0.58	3
Arousal	0.60	5
Avoidant	0.71	4

1Statement of Problem

Teachers are the backbone of every educational system. There are numbers of task which a teacher has to perform. To some extent a teacher transforms his behaviour to students. Procrastination results into various negative consequences like anxiety, stress, poor performance etc.. Hence the present study assesses the frequency of procrastination among the teachers and the relationship between procrastination and the demographic factors

Non- Parametric Tests

One of the distinguishing features of this research article is that non-parametric tests were used to analyze the data. An assessment of the normality of data is a prerequisite for many statistical tests because normal data is an underlying assumption in parametric testing. Shapiro- Wilk test was used to test the normality of data and results indicated the data was significantly deviate from the normal distribution. The collected data was failed to meet the assumption of normality. Therefore, Mann Whitney U, Kruskal Wallis and Spearman's rank correlation tests were used. The test was applied after satisfying the assumption of these tests. Like one of the assumption of Krsukal Wallis test is the similarity or similar shape of the distribution which was statistically tested.

Analysis and Interpretation

The objective of the study was to find the level of procrastination among the teachers. In order to achieve the objective mean value of the responses was found out. The respondent has equal and more than average score (Average \geq 3) was considered procrastinators. The collected

data was analyzed and presented in the graphs. According the results 30.70% respondents were found procrastinators (Average ≥ 3) rest of 69.30 % were not procrastinators.

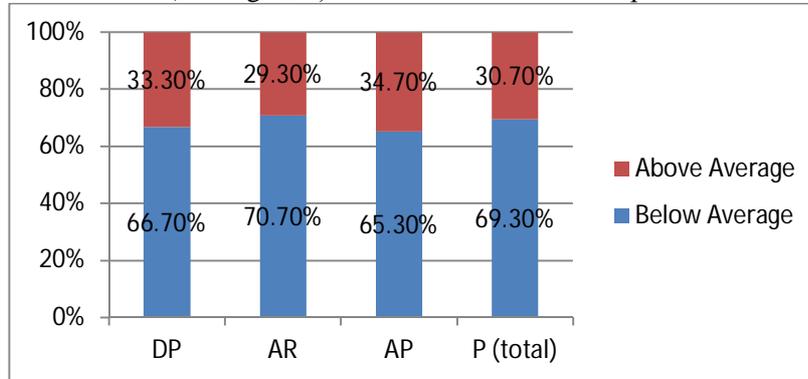


Figure 1: Level of Procrastination

Further, a comparative analysis, among the dimensions was conducted and the results indicated that only 33.30 % respondent was decisional, 29.30% respondents were arousal and 34.37% respondents were avoidant procrastinators. A comparative look on the results indicated that most of the respondents were prone to avoidant procrastinators than decisional and arousal procrastination.

Descriptive statistics were used to compare the procrastination level between male and female respondents. A comparative look on the results indicated that male respondents (M = 32.53) were more procrastinators than the female (M = 29.80) in totality (Table 2). Similar results were obtained when a comparative analysis of genders conducted with respect to the different dimensions of procrastination. The level of decisional (M = 6.85), arousal (M = 13.46) and avoidant (M = 12.20) procrastination was found high among the male respondents.

		N	Mean	Std. Deviation
Procrastination	Female	26	29.8077	8.76821
	Male	49	32.5306	9.50242
	Total	75	31.5867	9.28686
Decisional	Female	26	6.0000	2.68328
	Male	49	6.8571	3.46410
	Total	75	6.5600	3.22256
Arousal	Female	26	12.1923	4.17631
	Male	49	13.4694	4.46795
	Total	75	13.0267	4.38355
Avoidant	Female	26	11.6154	4.43691
	Male	49	12.2041	4.09766
	Total	75	12.0000	4.19781

Before analyzing the significant difference among the different profile of the respondents a descriptive analysis was conducted. According to the results Professors were found more procrastinators (M = 36.69) and followed by assistant (M = 31.72) and, associate professors (M = 29.13). Decisional and arousal procrastination was also high among the professors than assistant and associate professors. The level of avoidant procrastination (M = 13.09) was high among the assistant professors as follows by professors (M = 11.30) and associate professors (M = 11.06).

Professors were found more procrastinators the reasons can be that they are of higher rank of the professions so they might irrationally delay on tasks.

Table 3 : Descriptive Statistics regarding Profile and Procrastination				
		N	Mean	Std. Deviation
Procrastination (Total)	Assistant Professor	33	31.7273	8.22068
	Associate Professor	29	29.1379	9.23396
	Professor	13	36.6923	10.48320
	Total	75	31.5867	9.28686
Decisional	Assistant Professor	33	6.3636	3.24825
	Associate Professor	29	5.8966	2.94406
	Professor	13	8.5385	3.20456
	Total	75	6.5600	3.22256
Arousal	Assistant Professor	33	12.2727	3.76889
	Associate Professor	29	12.1724	4.41644
	Professor	13	16.8462	3.99679
	Total	75	13.0267	4.38355
Avoidant	Assistant Professor	33	13.0909	3.23423
	Associate Professor	29	11.0690	4.93480
	Professor	13	11.3077	4.25019
	Total	75	12.0000	4.19781

The collected data were failed to satisfy the assumption of normality therefore Mann-Whitney Test is used to compare the two groups. The test was applied after considering all the assumptions. The results did not show significance mean rank difference between males and females with respect to procrastination ($p > 0.05$). Hence, the hypothesis H_1 : *There would be a significant influence of gender on the procrastination level of respondents* fails to verify. The results were contrary to Steel and Ferrari (2014) , Adu (2014) and Erdinç (2009).

Table 4 : Mann- Whitney U Test Statistics^a level of procrastination between males and females				
	P	DP	AR	AP
Mann-Whitney U	546.000	563.000	532.500	594.500
Wilcoxon W	897.000	914.000	883.500	945.500
Z	-1.015	-.861	-1.174	-.479
Asymp. Sig. (2-tailed)	.310	.389	.241	.632
a. Grouping Variable: Gender				

In order to compare the procrastination behaviour among assistant, associate and professors Kruskal Wallis Test was used. It is a non-parametric test to compare the more than two groups when the data was not normality distributed. But before applying the Kruskal Wallis test the assumption of the test need to be satisfied. However, the Kruskal Wallis test has applied after satisfying the assumptions. According the results (Table 5) the total score of the respondents was failed to attain any level of significance (Chi-Square = 4.349 and $p > 0.05$). Decisional procrastination and arousal procrastination have shown significant results respectively (Chi-Square = 4.349 and $p > 0.05$ and Chi-Square = 11.361 and $p > 0.01$). The results indicated that

there was a significant mean rank difference between the profile groups with respect to decisional and arousal procrastination.

Table 5 : Kruskal Wallis Test Statistics^{a,b} for Profile of respondents with respect to Procrastination Components				
	P	DP	AR	AP
Chi-Square	4.349	6.048	11.361	2.987
df	2	2	2	2
Asymp. Sig.	.114	.049	.003	.225
a. Kruskal Wallis Test				
b. Grouping Variable: PROFILE				

There was no availability of Post- Hoc test during running of test, but an attempt has been made to compare two groups by select cases command in SPSS. In order to compare the score of the two groups were selected at different stages.

When the procrastination total score of assistant professor was compared to associate professor the results were not found significant for procrastination and its dimensions (Table 6).

Table 6 : Kruskal Wallis Test Statistics^{a,b} for comparison of Assistant and Associate Professors with respect to Procrastination Components				
	Procrastination	Decisional	Arousal	Avoidant
Chi-Square	.911	.250	.040	2.095
df	1	1	1	1
Asymp. Sig.	.340	.617	.842	.148
a. Kruskal Wallis Test				
b. Grouping Variable: PROFILE				

Further, a comparison of assistant professors and professors were made with respect to procrastination. The results (Table 7) were found significant for decisional and arousal procrastination as the Chi-Square values were found 4.004 ($p < 0.05$) and 10.058 ($p < 0.01$).

Table 7 : Kruskal Wallis Test Statistics^{a,b} for comparison of Assistant Professors and Professors with respect to Procrastination Components				
	Procrastination	Decisional	Arousal	Avoidant
Chi-Square	1.940	4.004	10.058	2.068
df	1	1	1	1
Asymp. Sig.	.164	.045	.002	.150
a. Kruskal Wallis Test				
b. Grouping Variable: PROFILE				

Finally, the score of associate professors and professors was compared (Table 8) and results were found significant for total procrastination (Chi- Square = 4.24, $p < 0.05$), decisional (Chi- Square = 5.83, $p < 0.05$) and arousal procrastination (Chi- Square = 9.058), $p < 0.01$). Hence, the results in totality did not support the hypothesis H_2 : *There would not be a significant influence of the profile of respondents on procrastination.*

Table 8 : Kruskal Wallis Test Statistics^{a,b} for comparison of Associate Professors and Professors with respect to Procrastination Components				
	Procrastination	Decisional	Arousal	Avoidant
Chi-Square	4.240	5.839	9.058	.012

df	1	1	1	1
Asymp. Sig.	.039	.016	.003	.912
a. Kruskal Wallis Test				
b. Grouping Variable: PROFILE				

Further, Spearman's Rank correlation was applied in order to find the relationship of procrastination with age and experience of the respondents. The table depicts that age was significantly correlated with the avoidant procrastination as are = -0.239 and $p < 0.05$. Other two dimensions were not correlated with the age. The results indicated that with the increase of the age the tendency of procrastination, of a person declined a person gets a level of maturity with the increasing age and tried to do the task at the time rather than to avoid it. Hence, the hypothesis H_3 : *There would be a significant relationship between procrastination and age of respondents* was verified. The experience of respondents was unsuccessful to establish any significant relationship with procrastination and its dimensions. Hence, the present results have a partial touch of reality and the hypothesis H_4 : *There would not be a significant relationship between procrastination and experience of respondents* was verified.

	AGE	Experience
Procrastination	.002	.083
Decisional	.091	.115
Arousal	.201	.200
Avoidant	-.239*	-.169

Conclusion

In sum, results revealed that out of the total sample approximately one third professional teachers were procrastinators. The level of procrastination was approximately same on the each dimension. It cleared that some teachers procrastinates on decision-making and posse avoidant and arousal behaviour. As no significant difference was found between male and female teachers, it indicates that gender has no impact on the tendency of the procrastination, but the level of procrastination was high among the male teachers. The profile of the respondents had a significant impact on the decisional and arousal procrastination. The results indicated that decisional procrastination was significantly differed between assistant, associate and professors. Descriptive analysis shows that professors were more procrastinators; the reason of this can be changed in profile and responsibilities. As the professor is the highest rank of the profession they might have no motivation for involvement in the work. A relevant information indicated that the level of associate professors and professors also differ significantly. Generally, associate professors remain busy with research and other work activities. Throw the results a striking fact come out that experience has no relationship with procrastination, but profile had a significant impact on procrastination. It clearly indicated that a profile provides a dignity to person to act or react to the situation rather than experience. The other relevant results indicated that age had a significant adverse relationship with procrastination which clearly indicated that increasing age affects the procrastination level adversely. These results are matched to Steel and Ferrari (2013) who revealed that a higher age of person lead to low procrastination because increasing age provided a maturity to person and person becomes conscious.

Recommendations

- Previous literature, evidently explains various negative consequences of procrastination behaviors like poor performance, increased stress, lower grades, poorer health, decreased long-term learning and lower self-esteem. So, organizations should check for such type of behavior at fixed interval and organizations should organize the training programs for employees.
- As the profile of the respondents had significant impact on the procrastination behavior, thus the university should redesign the duties and responsibility of the teachers.
- Professors were found significantly more procrastinators so the universities must design the work of professors which provides them motivation.

Limitations of Study

- The sample size was too small and appropriation of sample size was not determined.
- The sample was collected from different departments which were not represented any particular department, university etc.

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