



# PERFECTIONISM, PSYCHOLOGICAL DISTRESS AND PROCRASTINATION AMONG STUDENTS OF ART AND DESIGN: A COMPARATIVE STUDY

**Jawairia Latif**, M.Phil Scholar, Psychology Department, University of Gujrat, Gujrat, Pakistan

**Rukhsana Bashir**, Ph.D., Assistant Professor, Special Education Department, University of Punjab, Pakistan

**Bushra Akram**, Ph.D. Associate Professor, Psychology Department, University of Gujrat, Gujrat

**Abstract-** The level of perfectionism, psychological distress and procrastination between the students of different departments of art and design was compared in this cross-sectional study. The mean score differences in the same students were also addressed with respect to their demographic characteristics. It was identified that how perfectionism psychological distress and procrastination are related to each other? 380 students from SADA department of University of Gujrat were selected through Stratified Random Sampling Technique. All the students responded on Urdu measures of concerned variables i.e. Frost Multidimensional Perfectionism Scale, Kessler psychological Distress Scale and Procrastination Scale along with demographic sheet. Non-Parametric tests (Kruskal-Wallis test, Mann-Whitney U test and Spearman Order Rank Correlation) were used to analyze data. Results indicated that the students of communication design have highest level of perfectionism, psychological distress and procrastination than the students of other departments of art and design. It was also disclosed that female students have higher perfectionism. Level of procrastination was highest among upper class students while, level of Psychological distress found to be higher among lower class students and who belong to rural areas. There was a significant positive relationship of perfectionism with psychological distress and procrastination in students of each department. This study emphasized the importance of examining psychological variables among students of creative field.

**Keywords.** Perfectionism, psychological distress, procrastination, art & design students

## I. INTRODUCTION

Although, perfectionism has been proved as a beneficial construct for students in most of the studies (Stoeber & Otto, 2006) but in today's world it is becoming a noteworthy moral dilemma in all over the world predominantly among students as it greatly impact the students' mental health. One study demonstrated it a dangerous behavior as 30% undergraduates reported high depressive symptoms because of perfectionism (Sandoiu, A. 2018). On the other hand, an artist and a designer require certain level of perfectionism, creative energy and insight as a basic component of their work, but it becomes awful when they cross that certain limit because of excessive thinking patterns. So, in the present study art and design students were taken into account to check and compare the levels of perfectionism in relation to psychological distress and procrastination with respect to their departments.

A persons' striving to be complete and perfect, to setting up high performance criteria and the capability to face critical evaluation is known as Perfectionism. It is truly a personality trait (Oddo-Sommerfeld, Hain, Louwen, & Schermelleh-Engel, 2016). The main factors of perfectionism are: perfectionistic concerns about others' expectations and perfectionistic striving to be perfect (Hewitt, Flett, Besser, Sherry, & McGee, 2003) and these are the factors that became the cause of early death in adults (Fry & Debats, 2009) as Caelian in 2006 established this fact in his research that perfectionistic behavior lead to suicidal risks.

One of the theorists of perfectionism, Karen Horney depicted the construct as a neurotic personality trait in fact it is "The Tyranny of Should" (Horney, 1950). While many years later, the Albert Ellis also provided a glance on the negative side of the construct by making a distinction between the mantra that individuals use to repeat "wanting to be perfect" and "perfection must be obtained" and he well-known that the second one is harmful for peoples' psychological wellbeing as it is an illogical thought of being perfect (Ellis, 2002). According to Aaron Beck (2002) perfectionism is a dysfunctional attitude in a manner that it influences individuals' view about self, others and about the world (Beck, 2002).

Hewitt and Flett (2002) research indicates students who have the greater adherence to perfectionism use to self criticize with the notion that "Nothing has gotten better in my life, so I obviously did not perform perfectly enough" even after successfully attaining their goals which badly engulf their self satisfaction and they find themselves as failure. Negative aspect of perfectionism leads us toward psychological distress as Pirbaglou validated the positive correlation between perfectionism, anxiety and depressive symptoms (Pirbaglou, 2013). Psychological distress is termed as an emotional condition which comes up during the threatening circumstances (Lerutla, 2000) and it is also occurs because of persons' hopelessness about

future and low enthusiasm (Lincoln, Taylor & Watkins, 2011). The three components: self criticism, dysfunctional defense style, and maladaptive coping give rise to depressive symptoms among perfectionists (Dunkley, Blankstein, Masheb, & Grilo, 2006). Other risk factors of psychological distress that embrace failures in educational settings includes excessive worry and tension in younger age and gender role i.e. females are more likely to have depressive symptoms (King et al., 2008). Whereas, Fava and kindler found neuroticism personality trait and negligence as a risk factors for mental distress (Fava & Kendler, 2000). According to Flett et al. (2004) perfectionism and psychological distress are the precursors for procrastination among students which is defined as an act of delaying and avoiding tasks regardless of knowing the worst consequences of that delay which are obligatory to do (Van-Eerde, 2003). Sapdine portrayed that the people who perform this behavior unintentionally are named as perfectionist procrastinators in which they work so hard but they fail to finish the task because of their excessive focus on details and they get restless to meet high expectations (Sapadin, 2014). Wider portion of adults particularly University students more prone to have this delaying behavior (Morales, 2007). Harriott and Ferrari also found the greater prevalence of this behavior among educational field (Harriott & Ferrari, 1996). The two types of procrastination have been identified by Chu and Choi which includes: Active procrastination, in which person prefers to do less important task first on those tasks which assigned first. Second one is passive procrastination, in which people feel inability to complete their tasks because of poor decision making (Chu & Choi, 2005). Goode also found that level of procrastination in students is 70% as compared to general population who come up with 20% (Goode, 2008). Moreover, it was established by many authors that these three variables are interlinked to each other. In this aspect, Procrastination is found to be associated to psychological distress as the psychoanalytic perspective of Freud in 1953 clearly portrayed that “why people avoid doing the tasks”? He stated that people avoid doing tasks when their ego is threatened and they experience anxiety just because of the thought like you will fail to do the task, in retort, their defense mechanisms get active in the form of avoiding that task (cited in Ferrari, Johnson, & McCown, 1995). Perfectionism and anxiety originated as an inhibitory factor in academic performance (Gregersen & Horwitz, 2002). Balkis and Duru found the positive correlation between perfectionism and procrastination, as the irrational beliefs is the common factor among both (Balkis & Duru, 2017). While, it was demonstrated that fear of failure is the main reason following perfectinistic behavior that results in anxiety (Yurtseven & Akpur, 2018). On the other hand, literature showed the positive correlation between negative perfectionism and procrastination (Jahani, Ehsanikenari, & Sharif, 2018). Smith, Sherry, Saklofske, and Mushquash (2017) also reported the same direction among these two variables. Likewise, Gustavson et al. (2017) supported that people with high procrastination experience more internalizing and externalizing symptoms of psychopathology and this relationship was determined by fear of failure which is one of the causes of perfectionism (Gustavson et al., 2017) but the present study has not only found the relationship among perfectionism, psychological distress and procrastination also compared the level of these variables among students who belong to different area of creative field (Art and Design) which has not been taken under exploration earlier. Furthermore, no research has been conducted on the patterns of demographic characteristics in relation to these variables among art and design students particularly among Pakistan. So, the current study was also aimed to examine difference of these variables among students in account of their demographic characteristics.

### **Hypotheses**

1. There were significant differences in the levels of perfectionism psychological distress and procrastination among participants on the basis of their departments.
2. There were significant differences in the mean scores of perfectionism, psychological distress and procrastination among participants on the basis of their demographic characteristics.
3. There was positive correlation between perfectionism, psychological distress and procrastination.

## **II. METHOD**

### **Study Design**

To determine the level of perfectionism psychological distress and procrastination differences among students of seven departments of art and design, cross sectional survey design was used.

### **Sample**

380 students from SADA (School of Art Design & Architecture) University of Gujrat, were selected through Stratified Random Sampling Technique. In which 15% were from Product design (n=57), 14.7% from Textile design (n=56), 12.1% from Fine Arts (n=46), 9.7% from Ceramics design (n=37), 19.5% from

Architecture design (n=74), 14.5% from Communication design (n=55) and 14.5% from Multimedia design (n=55). This sample size was generated by using Taro Yamane formula. To equalize the sample following inclusion and exclusion criteria was made.

**Inclusion Criteria.** Both male and female students were included. Students with age range (18-26) were part of the study. Only 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> semester of students were selected. Married and unmarried were included.

**Exclusion Criteria.** Other departments' and universities' students were excluded and students having age above of 26 years were also disqualified.

Table 1  
*Demographic Characteristics of the Sample (N=380)*

Characteristics	<i>f</i>	%
Gender		
Male	151	39.7
Female	229	60.3
Age (in years)		
18-20	126	33.2
21-23	168	44.2
24-26	86	22.6
Semester		
2 <sup>nd</sup>	101	26.6
4 <sup>th</sup>	103	27.1
6 <sup>th</sup>	96	25.3
8 <sup>th</sup>	80	21.1
Residential Area		
Urban	136	35.8
Rural	244	64.2
Marital Status		
Married	36	9.5
Unmarried	344	90.5
Family Structure		
Nuclear	226	59.5
Joint	154	40.5
Birth Order		
0-3 <sup>rd</sup>	220	57.9
4 <sup>th</sup> -6 <sup>th</sup>	160	42.1
Socioeconomic Status		
Lower Class	39	10.3
Middle Class	292	76.8
Upper Class	49	12.9
Departments		
Product design	57	15.0
Textile Design	56	14.7
Fine Arts	46	12.1
Ceramics Design	37	9.7
Architecture design	74	19.5
Communication design	55	14.5
Multimedia Design	55	14.5

## Measures

**Demographic Sheet.** In this form, information related to students' gender, marital status, family structure, socioeconomic status and residential area was taken. Questions about participants' birth order, age, department and semester were also asked.

**Frost Multidimensional Perfectionism Scale (Frost, Marten, Lahart & Rosenblate, 1990).** It was used to measure the extent of overall perfectionism with six dimensions. It helped to measure different subscales which include: 9 items of Concern over Mistakes (CM), 7 items of Personal Standards (PS), 5 items of Parental Expectations (PE); 4 items of Parental Criticism (PC); 4 items of Doubts about Actions (DA); and 6

items of Organization (ORG). It comprised of five point likert scale i.e. 1 (strongly disagree) to 5 (strongly agree) for total of 35 items. If participants got higher scores on all subscales excluding Organization subscale it means they have high perfectionism level. The scale had strong internal consistency .90. In the present study the scale was used after modifying into Urdu language with internal consistency of by using the guidelines of Sousa and Rojjanasrirat given in 2011. Urdu version obtained the internal consistency of .94.

**Kessler Psychological Distress Scale K10+ (Kessler et al., 2003).** The K10+ is a 6 item scale while the item 1 consisted of 10 parts. It was designed to measure the persons' feelings they felt in the past 30 days. Item number 1 and 6 had five point rating scale (1 every time to 5 never). On Item 2 students responded on 3 categories with 1 to 7 scores. Item no. 3 to 5 was continuous. Sum of the scores on each item represented the score of subject. Reliability coefficient of the scale was .74. Urdu version of this scale was utilized in the present research.

**Procrastination Scale (Lay, 1986).** It was used to identify the students' level of procrastination in general tasks. It consisted of 20 items with five point likert scale 1 (extremely characteristic) to 5 (extremely uncharacteristic) while it was reversed for 10 items (3, 4, 6, 8, 11, 13, 14, 15, 18, 20) from 5 (extremely characteristic) to 1 (extremely uncharacteristic). Higher procrastination determined by the participants' high score on all the items. Reversed items depicted trait like procrastination. Scale had alpha reliability ( $\alpha=.84$ ). The scale was used after adapting into Urdu language by using specific strategy Sousa and Rojjanasrirat in 2011 which contains the internal consistency of .86.

#### Procedure

At the very first stage of current study formal permission was taken from the authors of the scales, than by the permission of the Director of SADA, University of Gujrat the list of enrolled students in all the seven departments of SADA (School of Art, Design and Architecture) was collected. After that, Taro Yamane formula was applied to generate the sample size of 380 students from each department. This sample was selected by using stratified random sampling technique was used. Verbal permission from the teachers was also taken as the participants were approached during their class time. Consent form was signed by the subjects before completing all the questionnaires. They were also assured for the confidentiality of their information.

### III. RESULTS

Data was analyzed by using SPSS (Statistical Package for Social Sciences). Non parametric tests were applied as the data was not normal. To find the mean score difference of variables among students of more than three departments Kruskal-Wallis test was applied. Mann-Whitney U test was used to find mean differences for demographic variables and to find the relationship among psychological variables Spearman Order Rank Correlation was used.

Table 2  
Comparison of Students' Means Rank for the Level of Perfectionism, Psychological Distress and Procrastination on Account of their Departments (Kruskal-Wallis Test)

Variables	Departments	N	Mean Rank	X <sup>2</sup>	Sig.(2tailed)
Perfectionism	Product Design	57	215.85	34.4	.00
	Textile Design	56	209.82		
	Fine Arts	46	125.65		
	Ceramics Design	37	156.35		
	Architecture Design	74	190.99		
	Communication Design	55	235.27		
	Multimedia Design	55	176.34		
	Total	380			
	Product Design	57	224.86		
	Textile design	56	198.94		
	Fine Arts	46	156.41		

Psychological Distress	Ceramics Design	37	166.41	20.84	.00
	Architecture Design	74	177.99		
	Communication Design	55	226.90		
	Multimedia Design	55	171.45		
	Total	380			
Procrastination	Product Design	57	201.91	50.04	.00
	Textile Design	56	196.40		
	Fine Arts	46	152.20		
	Ceramics Design	37	155.78		
	Architecture Design	74	173.99		
	Communication Design	55	277.79		
	Multimedia Design	55	162.98		
Total	380				

\* $p < .05$

Results depicted in the Table 2 determined the significant difference at the perfectionism, psychological distress and procrastination scores of students with respect to their specialization area,  $X^2=34.4$ ,  $p < .05$  for perfectionism,  $X^2=20.84$ ,  $p < .05$  for Psychological Distress and  $X^2=50.04$ ,  $p < .05$  for procrastination. So the results indicated that the level of all the variables was higher among the students of Communication design than other departments.

Graphical representation of mean score differences are given below which revealed that all that students who studying in seven departments of art and design, University of Gujrat, students of communication department got the highest score in perfectionism, psychological distress and procrastination.

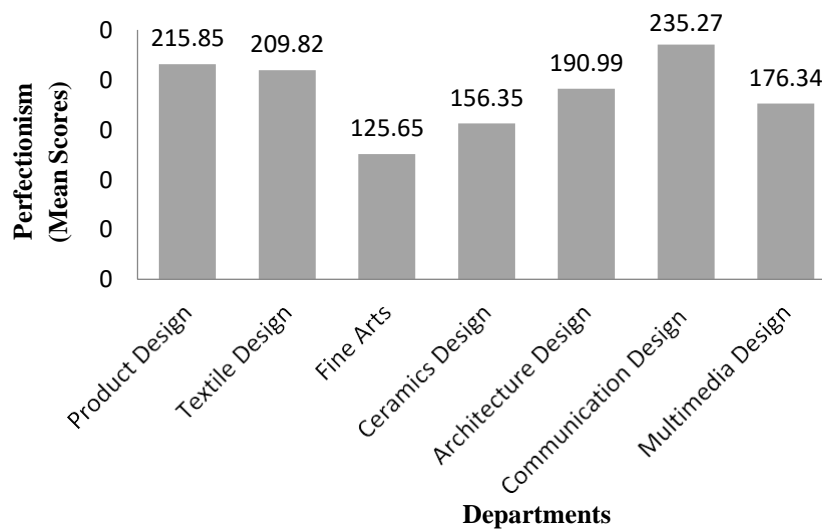


Figure 1. Significant differences in the mean scores of Perfectionism level among students of all departments.

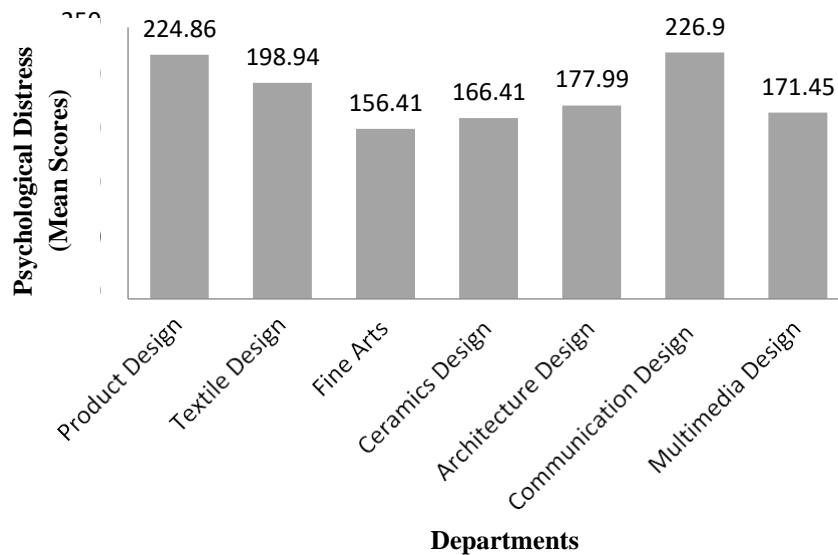


Figure 2. Significant differences in the mean scores of psychological distress level among students of all departments.

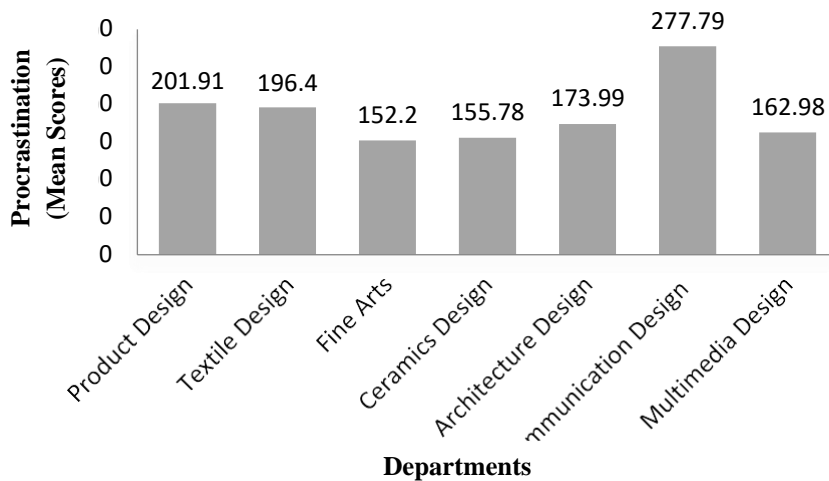


Figure 3. Significant differences in the mean scores of Procrastination level among students of all departments.

Table 3  
Perfectionism Differences among Males and Females

Gender	Mean Rank	Mean Rank	Z
Male (n=151)	169.44	204.39	-3.03
Female (n=229)			

\*  $p < .05$

Table 3 indicated that females are more perfectionists than males. As the results manifested the significant difference in the scores of Male (mean rank= 169.44) and Female (mean rank= 204.39) conditions,  $Z = -3.03$ ,  $p = .002$  ( $p < .05$ ) for perfectionism.

Table 4

Differences of psychological Distress among Students on the bases of Residential Area			
Residential Area (n=136)	Urban Area (n=244s)	Rural Area	
Psychological Distress	Mean Rank 169.80	Mean Rank 202.04	Z -2.74

\* $p < .05$ 

Results in Table 4 represented that students who belong to creative fields had different level of psychological distress according to their residential area i.e. students who belong to rural area depicted higher psychological distress than urban students with Mean Rank=202.04 and Mean Rank=169.80 respectively, conditions,  $Z = -2.74$ ,  $p = .006$  ( $p < .05$ ).

Table 5  
Psychological Distress and Procrastination Differences among Students on the basis of their Socioeconomic Status

Variable	Socioeconomic Status	N	Mean Rank	$X^2$	Sig.(2tailed)
Psychological Distress	Lower Class	39	234.12	6.93	.031
	Middle Class	292	184.95		
	Upper Class	49	188.85		
	Total	380			
Procrastination	Lower Class	39	166.17	6.07	.048
	Middle Class	292	188.46		
	Upper Class	49	222.04		
	Total	380			

\* $p < .05$ 

Table 5 depicted the mean score differences in students  $X^2 = 6.93$ ,  $p < .05$  for psychological distress, which specifically indicated that students who have lower socioeconomic status suffered more from distress than others. At the same time table also showed that the students of art and design who belong to upper class procrastinate more than others by showing the statistically significant difference in procrastination mean scores on the basis of their socioeconomic status,  $X^2 = 6.07$ ,  $p = .04$  ( $p < .05$ ).

Table 6  
Spearman's Rank Order Correlation for Study Variables

Variables	1	2	3
1. Perfectionism	-		
2. Psychological Distress	.156**	-	
3. Procrastination	.152**	.038**	-

\*\* $p < .01$ 

Results of Spearman Product Moment Correlation have been shown in the table 6 according to which there is a significant positive correlation between perfectionism psychological distress and procrastination, conditions. In particular results reveal that in students of art and design, as level of perfectionism increases psychological distress and procrastination level also increases.

#### IV. DISCUSSION

The main focus of present cross sectional research was those students who belong to creative fields like art and design enrolled in the seven departments of University of Gujrat. It was hypothesized to find the significant differences in the level of perfectionism, psychological distress and procrastination among these students. Results supported the hypotheses and depicted that students who have high level of perfectionism also have high level of psychological distress and procrastination which is supported by the previous researches that people are more prone to have psychological distress like depression with the habit of excessive critical thinking on every task (Smith et al, 2018) and results in procrastination (Flett et al., 2004) whereas, no research has been done previously on particularly the creative students.

Significant differences in the all study variables with respect to demographic characteristics of the students was also found and results suggest that students' mean scores differ on perfectionism in account of their gender in a manner that females have high level of perfectionism than males. This study showed the consistency with the work of Gawlik who argued the high perfectionism in females than males. On the other hand level of psychological distress significantly differs in students according to their residential area that students of rural area have high psychological distress than students of urban area, which is supported by the previous research done by Stickley in 2015 that distress level is prevalent among people living in villages than those who living in capital countries (Stickley, 2015). One more finding suggested the differences of distress level in students with respect to their socioeconomic status in a way that lower class students reported high distress than middle and upper class students. This finding is consistent with a previous research which found that very poor people are more likely to have psychological distress than people having moderate socioeconomic status (Islam, 2019), while, procrastination has been found to be higher among students who fit in upper class for their everyday tasks, whereas no support has been found from the literature.

The findings of correlation analysis exhibited the positive relationship between perfectionism, psychological distress and procrastination. The results of one study conducted by Comerchero and Fortugno have showed that there is positive association between perfectionism and anxiety (Comerchero and Fortugno, 2013) and other study indicated the positive relationship perfectionism and procrastination (Smith, 2017), both represented the consistency of this finding.

#### V. LIMITATIONS AND SUGGESTIONS

Following limitations has been acknowledged in the present research which are related to the sample that the main focus of the study was only undergraduate students with the age rang 18-26 as the PhD students of these departments were not accessible. Secondly the sample was drawn only from one institute University of Gujrat, so the generalization of the findings is limited. Future research may opt to overcome these limitations by incorporating more representative sample. External validity of the research can also be increased by taking PhD students and faculty member of art and design departments under investigation in future research. Furthermore, the reasons behind the perfectionistic behavior of art and design students should also be studied, as well as the factors that led to students' procrastinating behavior should also be studied in Pakistani context.

#### VI. IMPLICATIONS

As in all the students of art and design certain level of perfectionism, psychological distress and procrastination has been depicted which vary according to their specialization area so teachers can help them to reduce this perfectionistic behavior in class setting by teaching them some important guidelines; specifically, train them to get rid of waiting for ideal conditions to start work, to just focus on affordable, logistic and possible ideas, encourage them to not to compare themselves with others and focus on their personal growth for sure. Guide them to just put attention on their focal point which is product instead of outcome. Some clinical implications can also prevent them from major distress as the current study endorsed that students who have high perfectionism also have high psychological distress. For presenting their work in front of critical audience Cognitive Behavior Therapy can be helpful to defeat their cognitive



distortions (frightened and intense feelings). They can get rid of their thoughts about future results and judgments by Mindfulness Self Compassion training that make them able to get aware of their present moment. Yoga therapy specifically cat/cow pose is also favorable for perfectionistic trends of art and design students as it enhances creativity and it gives them relief from repetitive thinking patterns.

## VII. CONCLUSION

This study was an attempt to understand the differences in the level of some imperative variables like perfectionism, psychological distress and procrastination among students of following departments; Communication design, Product design, Textile design, Architecture design, Multimedia design, Ceramics design and Fine Arts, University of Gujrat. So, it is empirically evident that the level of these variables varies in students from departments to department. Study emphasized on the needs of students who belong to creative fields in educational institutions. High distress level among students of rural area and who belong to lower class emphasized on the needs of social support.

## REFERENCES

1. Balkis, M., & Duru, E. (2017). Gender differences in the relationship between academic procrastination, satisfaction with academic life and academic performance. *Electronic Journal of Research in Educational Psychology*, 15(1), 105-125. <http://dx.doi.org/10.14204/ejrep.41.16042>
2. Beck, U., & Brown, G. (2002). Dysfunctional attitudes, perfectionism, and models of vulnerability to depression. *Perfectionism: Theory, Research and Treatment*
3. Caelian, C. (2006). *Trait Perfectionism Dimensions and Suicidal Behavior*. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy*, 215-235. American Psychological Association. <https://doi.org/10.1037/11377-010>
4. Chu, A. H., & Choi, J. N. (2005). Rethinking procrastination: Positive effects of "active" procrastination behavior on attitudes and performance. *Journal of Social Psychology*, 145(3), 245-264. doi: 10.3200/SOCP.145.3.245-264.
5. Comerchero, V., & Fortugno, D. (2013). Adaptive Perfectionism, Maladaptive Perfectionism and Statistics Anxiety in Graduate Psychology Students. *Psychology Learning & Teaching*, 12(1), 4-11. <https://doi.org/10.2304/plat.2013.12.1.4>
6. Dunkley, D. M., Blankstein, K. R., Masheb, R. M., & Grilo, C. M. (2006). Personal standards and evaluative concerns dimensions of „clinical“ perfectionism: A reply to Shafran et al. (2002, 2003) and Hewitt et al. (2003). *Behaviour Research and Therapy*, 44, 63-84.
7. Ellis, A. (2002). *Overcoming resistance: A rational emotive behavior therapy integrative approach*. New York: Springer.
8. Fava, M., & Kendler, K. S. (2000). Major depressive disorder. *National Library of Medicine*, 28(2), 335-41. doi: 10.1016/s0896-6273(00)00112-4.
9. Ferrari, J. R., Johnson, J. L., & McCown, W. G. (1995). *The Plenum series in social/clinical psychology. Procrastination and task avoidance: Theory, research, and treatment*. Plenum Press. <https://doi.org/10.1007/978-1-4899-0227-6>
10. Flett, G. L., Hewitt, P. L., Davis, R. A., & Sherry, S. B. (2004). *Description and Counseling of the Perfectionistic Procrastinator*. In H. C. Schouwenburg, C. H. Lay, T. A. Pychyl, & J. R. Ferrari (Eds.), *Counseling the procrastinator in academic settings* (p. 181-194). American Psychological Association. <https://doi.org/10.1037/10808-013>
11. Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
12. Fry, P. S., & Debats. (2009). Perfectionism and the Five-factor Personality Traits as Predictors of Mortality in Older Adults. *Journal of Health Psychology*, 14(4), 513-525.
13. Gawlik, M. F. (n.d.). *Variables Related to Perfectioni*. <https://www.mckendree.edu/academics/scholars/issue18/gawlik.htm> Retrieved August 26, 2020, from <https://www.mckendree.edu/academics/scholars/issue18/gawlik.htm>
14. Goode, C. (2008). Effects Of Academic Procrastination: Students Procrastination Affects More Than Grades. Retrieved from website <http://homeworktree.com/media/news-releases/academic-procrastination> accessed on October 13, 2008.

15. Gregersen, T., & Horwitz, E. K. (2002). Language Learning and Perfectionism: Anxious and Non-Anxious Learners' Reactions to Their Own Oral Performance. *Modern Language Journal*, 86, 562-570.
16. Gustavson, D.E., Pont, A. D., Hatoum, A. S., Rhee, s. H., Kremen, w. S., Hewitt, J. K., & Friedman, N. P. (2017). Genetic and Environmental Associations Between Procrastination and Internalizing/Externalizing Psychopatholog. *Clinical Psychological Science*, 1-30. DOI: 10.1177/2167702617706084
17. Harriott, J., & Ferrari, J. R. (1996). Prevalence of Procrastination among Samples of Adults. *Psychological Reports*, 78(2), 611-616. <https://doi.org/10.2466/pr0.1996.78.2.611>
18. Hewitt, P.L., & Flett, G.L. (2002). Perfectionism and stress in psychopathology. In G.L. Flett, & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp.255-284). Washington, DC: American Psychological Association.
19. Hewitt, P. L., Flett, G. L., Besser, A., Sherry, S. B., & McGee, B. J. (2003). Perfectionism is multidimensional: A reply to Shafran, Cooper, and Fairburn. *Behaviour Research and Therapy*, 41, 1221-1236.
20. Horney, K. (1950). *Neurosis and human growth; the struggle toward self-realization*. W. W. Norton.
21. Islam, F. M. A. (2019). Psychological distress and its association with socio-demographic factors in a rural district in Bangladesh: A cross-sectional study. *PLOS ONE*, 14(3), e0212765. <https://doi.org/10.1371/journal.pone.0212765>
22. Jahanni, H. J.G., Ehsanikenari, A., Sharif, A. S. (2018). Role of Self-Efficacy and Negative Perfectionism in the Prediction of Procrastination of Narcissistic Personality: A Study on Non-Clinical Subjects. *Emerging Science Journal*, 2(6), 388-399.
23. Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J, Normand, S-L.T., Manderscheid, R.W., Walters, E.E., Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*. 60(2), 184-189. Copyright © World Health Organization 2003
24. King, M., Walker, C., Levy, G., Bottomley, C., Royston, P., Weich, S., Bellón-Saameño, J. Á., Moreno, B., Švab, I., Rotar, D., Rifel, J., Maarooos, H.-I., Aluoja, A., Kalda, R., Neeleman, J., Geerlings, M. I., Xavier, M., Carraça, I., Gonçalves-Pereira, M., ... Nazareth, I. (2008). Development and Validation of an International Risk Prediction Algorithm for Episodes of Major Depression in General Practice Attendees. *Archives of General Psychiatry*, 65(12), 1368. <https://doi.org/10.1001/archpsyc.65.12.1368>
25. Lay, C. (1986). At last, my research article on procrastination. *Journal of Research in Personality*, 20, 474-495.
26. Lerutla, D.M. (2000). Psychological Stress Experienced By Black Adolescent Girls Prior to induced Abortion. *Msc-dissertation, Medical University of Southern Africa*.
27. Lincoln, K. D., Taylor, R. J., Watkins, D. C., & Chatters, L. M. (2011). Correlates of psychological distress and major depressive disorder among African American men. *Research on Social Work Practice*, 21, 278-288.
28. Morales, D. B. (2007). The relationships among procrastination, achievement, and the use of motivational messages within an online course. *Pro Quest Information and Learning Company*.
29. Pirbaglou, S., Cribbie, R. A., DPhil, J. I., Radhu, N., Vora, K., & Ritvo, P. (2013). Perfectionism, Anxiety, and Depressive Distress: Evidence for the Mediating Role of Negative Automatic Thoughts and Anxiety Sensitivity. *Journal of American College Health*, 618(8), 477-483.
30. Sandoiu, A. (2018). How perfectionism affects your (mental) health. retrieved from <https://www.medicalnewstoday.com/articles/323323.php>.
31. Sapadin, L. (2014, January 21). *procrastination : Dr. Linda Sapadin*. <https://drsapadin.com/Tag/Procrastination/>. <https://drsapadin.com/tag/procrastination/>
32. Smith, M. M., Sherry, S. B., Mclarnon, M. E., Flett, G. L., Hewitt, P. L., Saklofske, D. H., & Etherson, M. E. (2018). Why does socially prescribed perfectionism place people at risk for depression? A five-month, two-wave longitudinal study of the Perfectionism Social Disconnection Model. *Personality and Individual Differences*, 134, 49-54.
33. Smith, M. M., Sherry, S. B., Muquash, A. R., Saklofske, D. H., Gautreau, C. M., & Nealis, L. j. (2017). Perfectionism erodes social esteem and generates depressive symptoms: Studing mother-daughter dyads using a daily diary design with longitudinal follow-up. *Journal of Research in Personality*, 71, 72-79.
34. Oddo-Sommerfeld, S., Hain, S., Louwen, F., & Schermelleh-Engel, K. (2016). Longitudinal effects of dysfunctional perfectionism and avoidant personality style on postpartum mental disorders: Pathways through antepartum depression and anxiety. *Journal of Affective Disorders*, 191, 280-288. <https://doi.org/10.1016/j.jad.2015.11.040>

35. Sousa, V., & Rojjanasrirat, W. (2011). Translation, Adaptation and Validation of Instruments or Scales for Use in Cross-Cultural Health Care Research: A Clear and User Friendly Guideline. *Journal of Evaluation in Clinical Practice*, *17*, 268-274.
36. Stickley, A., Koyanagi, A., Roberts, B., McKee, M. (2015). Urban-rural differences in psychological distress in nine countries of the former Soviet Union. *J Affect Disord*, *178*, 142-148. doi:10.1016/j.jad.2015.02.020
37. Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, *10*, 295-319.
38. Van Erde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, *35*(6), 1401-1418. [https://doi.org/10.1016/s0191-8869\(02\)00358-6](https://doi.org/10.1016/s0191-8869(02)00358-6)
39. Yurtseven, N., & Akpur, U. (2018). Perfectionism, Anxiety and Procrastination as Predictors of EFL Academic Achievement: A Mixed Methods Study. *Novitas-ROYAL (Research on Youth and Language)*, *12*(2), 96-115