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### **Original Article**

# Distress Tolerance and Mental Health Problems among University Students

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## ABSTRACT

Academic stress is one of the major reasons which influence students' mental health. Tolerance significantly contributes to managing academic pressure, a sense of competence, and parental and social expectations while lacking causes mental health issues. **Objective:** To explore the relationship between distress tolerance and mental health problems among university students. **Methods:** 500 students from different universities of Faisalabad. The age range of the participants covered the years 20 to 40. The sample was taken using a purposive sampling technique. The following measures were used to assess the findings i.e. demographic form, distress tolerance scale, depression, anxiety and stress scale were used to explore the relationship between distress tolerance and mental health problems among university students. **Results:** Findings indicate a significant relationship between distress tolerance and depression (r = -.182, P < 0.01), distress tolerance and anxiety (r = -.243, P < 0.01), and distress tolerance and stress (-.252, P < 0.01) among university students. **Conclusions:** It is concluded that the level of tolerance significantly helps to overcome daily life stressors, anxieties, and depressive symptoms among the students.

#### INTRODUCTION

Distress tolerance is a crucial psychological outcome for medical students, as it denotes the capacity to endure negative emotional states. Low distress tolerance is a characteristic akin to a transdiagnostic risk factor [1]. It is a variable that transcends psychiatric diagnoses and elevates the likelihood that an individual will develop and sustain a broad spectrum of psychopathological issues [2] including anxiety, depression and substance use. The measurement of distress tolerance has been conducted using self-report measures and behavioral tasks (e.g. holding one's breath). Each of these measures has been designed to assess a distinct aspect of distress tolerance, namely frustration tolerance, emotional distress

tolerance, and physical distress tolerance [3]. For a multitude of reasons, distress tolerance has captivated the attention of clinical scientists and practitioners. It is primarily hypothesized that the distress tolerance construct contributes to the maintenance and development of a variety of psychopathological conditions (including substance use, anxiety, mood, and personality disorders)[4]. An essential integration of existing research on distress tolerance has been proposed for substance use and dependence, such as intolerance of emotion and somatic sensations [5]. However, there is a dearth of knowledge in this area. Anxiety disorders are characterized by fear and apprehension of specific situations or objects,

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in addition to physical manifestations of panic or anxiety, including perspiration and tachycardia [6]. Psychological disorder is a condition that may manifest subsequent to experiencing a distressing and/or traumatic incident [7], including but not limited to sexual or physical assault, unanticipated bereavement, or a natural catastrophe. Individuals afflicted with this disorder frequently experience distressing and enduring memories and thoughts associated with the incident, and exhibit a general disregard for emotions [8]. Additionally, Trafton and Gifford proposed that the development of tolerance to distress may be mediated by neurobiological substrates that underlie and regulate reward learning and response [9]. Moreover, the authors contend that if this conceptualization is precise, then a number of neurobiological mechanisms could potentially underpin and alter the manifestation of distress tolerance [10]. Distinction intolerance has been conceptualized as variations among individuals in their ability to endure physically distressing sensations. Discomfort intolerance, as opposed to conceptions that pertain exclusively to particular internal stimuli like pain, has been defined as a general apprehension toward interceptive bodily sensations that are unpleasant to the individual but not necessarily painful [11]. As a trait-like construct, discomfort intolerance is hypothesized to be relatively stable. As a result, intervention strategies that aim to alter maladaptive, typically avoidant or change-oriented reactions to exteroceptive stressful life events and aversive interceptive bodily sensations are utilized to modify anxiety and other problematic emotional states [12]. Distress tolerance can be conceptualized as the capacity of an individual to endure and confront adverse affective states. The phenomenon of distress tolerance has garnered significant attention and interest among psychology professionals, primarily due to its perceived role as a substantial contributor to the onset and persistence of diverse psychopathologies, such as substance misuse and personality disorders [13]. A condition of psychological well-being or the absence of mental illness constitutes mental health. It is the psychological state of an individual whose emotional and behavioral adaptation are considered to be satisfactory [14]. Mental health, according to the tenets of positive psychology and holism, may consist of the capacity to experience happiness in life and to maintain a balanced state between personal pursuits and the development of psychological resilience. Mental health encompasses variables such as perceived self-efficacy, intergenerational dependence, and the realization of one's intellectual and emotional potential [15]. Depressive and anxious disorders are prevalent among college students and have the potential to hinder both academic achievement and social interactions. Students have restricted access to professional assistance [16]. In psychology, distress tolerance is an emerging concept that has been formulated in a variety of methods. It pertains to the perceived ability of an individual to endure adverse emotional and/or other unpleasant conditions, as well as the behavioral manifestation of enduring distressing internal states induced by a stressor [17].

The purpose of current study is to get deeper understanding of distress tolerance and mental health issues. In the moments of experiencing distress and suffering, whether oneself or another, one has the capacity to embrace and delve into that emotion without hastening to alter it. Considerable variation exists among individuals in both their perception and reaction to stress. This variation could be defined as the degree of distress tolerance or, more commonly, the anxiety threshold of an individual.

### METHODS

In this research, correlational research design was chosen to explore the relationship between distress tolerance and mental health problems among university students and 500 sample size was calculated by using G-power formula. A purposive sampling technique was used to collect the data from different universities of Faisalabad Pakistan in the duration of July 2023- January 2024. University Student's educational level was B.S (Hons), M.S/M Phil, and Ph.D. In the sample, both married and single participants were included. The participant's age range was between 20 - 40 years. Further, participants who have struck off, migrated and completed his/her degree were not included in the study. Students who are performing administrative positions were not included in this study. The demographic information sheet was used to get the personal i.e. age, education, birth order, numbers of siblings, family structure and socioeconomic status etc. and academic information i.e. year of education, current and previous exams grads, interest in the study from the students. Simons and Gaher formulated the Distress Tolerance Scale (DTS) which was subsequently translated [18]. Level of distress tolerance is quantified using this scale's fifteen elements. This scale is extremely helpful for quantifying distressing or troubling emotions or beliefs. To assess subjective appraisal of distress, attention being absorbed by negative emotions, perceived ability to tolerate emotional distress, and regulation efforts to alleviate distress, four distinct categories of items were developed. Strongly agree, mildly disagree, agree and disagree equally, agree and disagree equally, mildly disagree, strongly agree comprised the scoring range. A higher score on this scale indicates a greater propensity to tolerate psychological

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distress, as determined by single-factor analysis of internal consistency. An Urdu version of the Depression, Anxiety, and Stress Scale (DASS21) was translated and a condensed version of the scale was devised by Lovibond and Lovibond [19]. Three subscales, including anxiety, melancholy, and stress, were condensed in the DASS. One item comprises each subscale. The rating scale consists of four response categories, spanning from zero (indicating complete nonapplicability to me) to three (indicating frequent application to me). A cumulative score ranging from 0 to 63 is obtained by adding the individual items. Every item receives a positive score. An increased score on each subscale would be indicative of a more pronounced degree of pathology. This scale exhibited commendable Cronbach's alpha values of 0.75, 0.74, and 0.79 for the anxiety, stress, and depression subscales, respectively. Additionally, it exhibited favorable factor loading values for 17 out of 21 items in terms of construct validity.31 to .75. Initially, the study protocol was submitted to the Ethical Research Committee (ERC), and the study was approved by the Board of Studies (BOS) final approval was taken from the Institutional Review Board (IBR) on 18-5-2023, Government College University Faisalabad. The researcher briefly described the participants about the purpose of the study. After it informed consent was given to patients and they were asked to read and sign it if you are willing to participate in the study, it was assured the received information will remain kept confidential and you have a right to withdraw from the study anytime, if you feel discomfort and version 21.0 of the Statistical Package for Social Sciences (SPSS) were used for all analyses.

## RESULTS

Table 1 shows the frequencies of different variables such as gender, Marital Status, Residence, Father Occupation, Father Education, Mother Education, Program and Living Status along with their percentages.

**Table 1:** Social Demographic Characteristics of Participants

Demographics		n(%)
Gender	Male	242 (48.4%)
	Female	258 (51.6%)
Marital Status	Marred	16 (3.2%)
	Unmarried	484 (96.8%)
Residence	Home	357(71.4%)
	Hostel	143 (28.6%)
Father Occupation	GOVT	17 (7.7)
	Private	48 (21.6)
	Business	41 (18.5)
	Non	42 (18.9)
Father Education	Educated	466 (93.2%)
	Uneducated	34(6.8%)
Mother Education	Educated	434 (86.8%)
	Uneducated	66 (13.2%)

Program	BS	349 (69.8%)
	MA/MSc	81 (16.2%)
	M Phil	60 (12.0%)
	PhD	10 (2.0%)
Living Status	One self	477 (95.4%)
	Rent	23 (4.6%)

Table 2 indicates that there is a significant relationship between distress tolerance and depression. \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 2:** Correlations between Distress Tolerance and Depression (N=500)

Variable	Depression	
	r	sig.
Distress Tolerance	182	0.01

Table 3 includes this is a significant relationship between distress tolerance and anxiety among university students (r = -.243, P < 0.01). \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 3:** Correlation between Distress Tolerance and Anxiety (N=500)

Variable	Anxiety	
	r	sig.
Distress Tolerance	243	0.01

Table 4 includes this is a significant relationship between distress tolerance and stress among university students (-.252, P < 0.01). \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 4:** Correlation between Distress Tolerance and Stress (N=500)

Variable	Stress	
	r	sig.
Distress Tolerance	252	0.01

## DISCUSSION

The results of current study indicate similar results to the study showing that depression and distress tolerance hurt student performance. There behind some reasons, this leads to students at this level. After taking a survey from student researchers led at the point that most respondents gave negative arguments about the effects of depression and distress tolerance on students' ability and success in study. Students both male and female face this condition in their study career [20]. Depression is a persistent, day-today emotional state characterized by a depressed demeanor. It can induce feelings of despondency, hopelessness, remorse, worthlessness, lack of motivation, and exhaustion. In addition to influencing libido drive, appetite, sleep, and self-esteem, it can occasionally impact physical health [1]. When in its most benign manifestation, depression does not impede the ability to carry out daily activities; however, it complicates tasks and diminishes their perceived value [8]. It also demonstrates

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that anxiety and distress tolerance hurt student performance. There behind some reasons, this leads to students at this level. After surveying student's researcher came to the point that most respondents gave negative arguments about the effects of anxiety and distress tolerance on students' ability and success in study [21]. Students both male and female face this condition in their study career. Here the researcher illustrated the experience of another researcher on behalf of experience [22]. Anxious and panicked individuals exhibit physical manifestations, including perspiration and tachycardia, in addition to fear and dread in response to particular situations or objects [23]. When an individual's reaction is deemed inappropriate for the circumstance, when the reaction is uncontrollable, or when the anxiety disrupts typical activities of living, a diagnosis of anxiety disorder is made [24]. Anxiety disorders consist of specific phobias, generalized anxiety disorder, and panic disorder [25]. The results of the present study are also consistent with the previous study indicating that there are behind some reasons, this leads to students at this level [26]. After surveying student's researcher led at the point that most respondents gave negative arguments about the effects of depression and distress tolerance on student's ability and success in study. Students both male and female face this condition in their study career [27,28]. According to the expertise of other researchers, stress disorders fall under the classification of stress disorders. Clients who meet the diagnostic criteria for PTSD, as outlined in the DSM-V-TR, must have encountered or witnessed a distressing incident involving the imminent danger of death or severe bodily harm to oneself or others. Furthermore, the individual must have exhibited a profound sense of fear or helplessness in response to that event [29]. Once the client satisfies these two requirements, the clinician will investigate the presence of distinct identifying symptoms. These symptoms may consist of persistent, intrusive, and distressing thoughts about the traumatic event, behavior or emotions that suggest the trauma is reoccurring, as well as severe psychological and physiological distress when confronted with internal or external cues that symbolize elements of the traumatic incident [30].

### CONCLUSIONS

It is concluded that distress tolerance is significantly associated with mental health problems among university students. A high degree of tolerance helps to overcome daily life stressors and anxious situations with better management while low distress tolerance provokes more degree of stressors and anxiety which causes failure and in later onset changes to depressive symptoms.

## Authors Contribution

Conceptualization: MS Methodology: NA, MS Formal analysis: MS

Writing-review and editing: SK, MI

All authors have read and agreed to the published version of the manuscript.

## Conflicts of Interest

The authors declare no conflict of interest.

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### REFERENCES

- [1] Conway CC, Naragon-Gainey K, Harris MT. The structure of distress tolerance and neighboring emotion regulation abilities. Assessment. 2021 Jun; 28(4): 1050-64. doi: 10.1177/1073191120954914.
- [2] Webb MK, Simons JS, Simons RM. Affect and drinking behavior: Moderating effects of involuntary attention to emotion and distress tolerance. Experimental and Clinical Psychopharmacology. 2020 Oct; 28(5): 576. doi: 10.1037/pha0000329.
- [3] Slabbert A, Hasking P, Boyes M. Riding the emotional roller coaster: The role of distress tolerance in non-suicidal self-injury. Psychiatry Research. 2018 Nov; 269: 309-15. doi: 10.1016/j.psychres.2018.08.061.
- [4] McHugh RK, Daughters SB, Lejuez CW, Murray HW, Hearon BA, Gorka SM et al. Shared variance among self-report and behavioral measures of distress intolerance. Cognitive Therapy and Research. 2011 Jun; 35: 266-75. doi: 10.1007/s10608-010-9295-1.
- [5] Glassman LH, Martin LM, Bradley LE, Ibrahim A, Goldstein SP, Forman EM et al. A brief report on the assessment of distress tolerance: Are we measuring the same construct? Journal of Rational-Emotive & Cognitive-Behavior Therapy. 2016 Jun; 34: 87-99. doi:10.1007/s10942-015-0224-9.
- [6] Shahzadi M, Unbrin A, Jabeen M. Internalizing disorder among individuals with substance use disorders: a systematic review. Journal of Development and Social Sciences. 2022 Mar 31; 3(1): 166-83. doi: 10.47205/jdss.2022(3-1)14.
- [7] Bernstein A, Marshall EC, Zvolensky MJ. Multimethod evaluation of distress tolerance measures and construct (s): Concurrent relations to mood and anxiety psychopathology and quality of life. Journal of Experimental Psychopathology. 2011 Jul; 2(3): 386-99. doi: 10.5127/jep.006610.
- [8] Sütterlin S, Schroijen M, Constantinou E, Smets E, Van den Bergh O, Van Diest I. Breath holding duration as a measure of distress tolerance: examining its

- relation to measures of executive control. Frontiers in Psychology. 2013 Jul; 4:47772. doi:
- [9] Trafton JA and Gifford EV. Behavioral reactivity and addiction: The adaptation of behavioral response to reward opportunities. The Journal of Neuropsychiatry and Clinical Neurosciences. 2008 Jan; 20(1): 23-35. doi: 10.1176/jnp.2008.20.1.23.
- [10] Chowdhury N, Kevorkian S, Hawn SE, Amstadter AB, Dick D, Kendler KS *et al.* Associations between personality and distress tolerance among trauma-exposed young adults. Personality and individual differences. 2018 Jan; 120: 166-70. doi: 10.1016/j.paid. 2017.08.041.
- [11] Cougle JR, Bernstein A, Zvolensky MJ, Vujanovic AA, Macatee RJ. Validation of self-report measures of emotional and physical distress tolerance. Journal of Psychopathology and Behavioral Assessment. 2013 Mar; 35(1): 76-84. doi: 10.1007/s10862-012-9317-2.
- [12] Hsu T, Thomas EB, Welch EK, O'Hara MW, McCabe JE. Examining the structure of distress tolerance: Are behavioral and self-report indicators assessing the same construct? Journal of Contextual Behavioral Science. 2023 Jan; 27: 143-51. doi: 10.1016/j.jcbs.20 23.02.001.
- [13] Leyro TM, Zvolensky MJ, Bernstein A. Distress tolerance and psychopathological symptoms and disorders: a review of the empirical literature among adults. Psychological Bulletin. 2010 Jul; 136(4): 576. doi:10.1037/a0019712.
- [14] Zeifman RJ, Boritz T, Barnhart R, Labrish C, McMain SF. The independent roles of mindfulness and distress tolerance in treatment outcomes in dialectical behavior therapy skills training. Personality Disorders: Theory, Research, and Treatment. 2020 May; 11(3): 181. doi: 10.1037/per0000 368.
- [15] Kiselica AM, Rojas E, Bornovalova MA, Dube C. The nomological network of self-reported distress tolerance. Assessment. 2015 Dec; 22(6): 715-29. doi: 10.1177/1073191114559407.
- [16] Anka A, Vujanovic, Zegel M. Distress tolerance in PTSD. In: Tull MT, Kimbrel NA, editors. Emotion in Posttraumatic Stress Disorder. Academic Press; 2020[cited 2024 Mar 8]. p. 343–76. doi: 10.1016/B978-0-12-816022-0.00012-0.
- [17] Galiano CS, Andrea AM, Tung ES, Brown TA, Rosellini AJ. Psychometric properties of the Distress Tolerance Scale in a clinical sample. Psychol Assess. 2024; 36(3): 192–9. doi: 10.1037/pas0001298.
- [18] Simons JS and Gaher RM. The Distress Tolerance Scale: Development and validation of a self-report measure. Motivation and Emotion. 2005 Jun; 29(2):

- 83-102. doi: 10.1007/s11031-005-7955-3.
- [19] Lovibond PF and Lovibond SH. The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behavior Research and Therapy. 1995 Mar; 33(3): 335-43. doi: 10.1016/0005-7967(94)00075-U.
- [20] Wolf KC and Kupchik A. School suspensions and adverse experiences in adulthood. Justice Quarterly. 2017 Apr 16; 34(3): 407–30. doi: 10.1080/07418825.20 16.1168475.
- [21] Cambareri JF and Kuhns JB. Perceptions and perceived challenges associated with a hypothetical career in law enforcement: Differences among male and female college students. Police Quarterly. 2018 Sep; 21(3): 335-57. doi: 10.1177/1098611118760862.
- [22] Jabeen M, Shahzadi M, Amin Z. Demographic Predictors of Conflict Resolution Styles Among Pakistani Adults. Journal of Professional & Applied Psychology. 2023 Dec; 4(4): 568-78. doi: 10.52053/jpap.v4i4.215.
- [23] Forsyth JJ, Jones J, Duval L, Bambridge A. Opportunities and barriers that females face for study and employment in sport. Journal of Hospitality, Leisure, Sport & Tourism Education. 2019 Jun; 24: 80-9. doi: 10.1016/j.jhlste.2019.01.005.
- [24] Craske MG, Rauch SL, Ursano R, Prenoveau J, Pine DS, Zinbarg RE. What is an anxiety disorder? Focus. 2011 Jul; 9(3): 369-88. doi: 10.1176/foc.9.3.foc369.
- [25] Ratering C, Van Der Heijden R, Martens K. Moving around with an anxiety disorder. Transportation Research Part F: Traffic Psychology and Behaviour. 2024 Jan; 100: 493-506. doi: 10.1016/j.trf.2023.12. 005.
- [26] Brown RA, Lejuez CW, Kahler CW, Strong DR, Zvolensky MJ. Distress tolerance and early smoking lapse. Clinical psychology review. 2005 Sep; 25(6): 713-33. doi:10.1016/j.cpr.2005.05.003.
- [27] Goff A. Stressors, Academic Performance, and Learned Resourcefulness in Baccalaureate Nursing Students. International Journal of Nursing Education Scholarship. 2011; 8(1). doi:10.2202/1548-923X.2114.
- [28] Hussain A, Shahzadi M, Saleem M, Ahmad T. Predicting Educational and Career Success: A Comprehensive Study of Personality Traits and Intelligence in University Students. Journal of Policy Research. 2023 Nov 26; 9(3): 234-9. doi: 10.61506/0 2.00110.
- [29] Cano MÁ, Castro FG, De La Rosa M, Amaro H, Vega WA, Sánchez M et al. Depressive symptoms and resilience among Hispanic emerging adults: Examining the moderating effects of mindfulness, distress

DOI: https://doi.org/10.54393/pjhs.v5i03.1336

- tolerance, emotion regulation, family cohesion, and social support. Behavioral Medicine. 2020 Oct; 46(3-4): 245-57. doi: 10.1080/08964289.2020.1712646.
- [30] Anestis MD, Bagge CL, Tull MT, Joiner TE. Clarifying the role of emotion dysregulation in the interpersonal –psychological theory of suicidal behavior in an undergraduate sample. Journal of Psychiatric Resources. 2011 May; 45(5): 603–11. doi: 10.1016/j.jpsy chires.2010.10.013.