

DEVELOPMENT OF TRAINEE CLINICAL PSYCHOLOGISTS' STRESSORS SCALE: A PRELIMINARY VALIDATION

Amna Noor^{*1}, Hadiqa Rehman²

^{*1,2} School of Professional Psychology, Department of Clinical Psychology, University of Management and Technology, Lahore, Pakistan.

^{*1}noonjafar514@gmail.com

^{*1}<https://orcid.org/0009-0004-4647-8410>

Corresponding Author: *

Amna Noor

DOI: <https://doi.org/10.5281/zenodo.16748346>

Received	Revised	Accepted	Published
27 April, 2025	22 June, 2025	16 July, 2025	05 August, 2025

ABSTRACT

Trainee clinical psychologists typically encounter a profusion of stressors directly associated with their monitored clinical practicum, coursework, and research obligations. The existing research endeavor explored the experience and manifestation of psychosocial stressors among trainee clinical psychologists within the socio-cultural framework of Pakistan. In the phase-I, phenomenological approach was employed to elicit key dimensions of psychosocial stressors from 10 trainee clinical psychologists aged 22-32 years. In phase II, item level and scale level Content Validity Index (I-CVIs and S-CVI) were ensured. In phase III, pilot testing was conducted on 20 trainees (females = 18; males = 2). In phase IV, a sample of 200 trainee clinical psychologists (females = 92%; males = 8%) between the ages of 22-32 ($M = 24.90$; $SD = 1.96$) was tested for psychometric properties of Trainee Clinical Psychologists' Stressors Scale along with Mental Health Professionals' Stress Scale and Satisfaction with Life Scale (Urdu). The sample was selected through purposive sampling technique. Exploratory Factor Analysis (EFA) unveiled three distinct domains of psychosocial stressors: supervisor related stressors, fears and apprehensions, and workload related stressors. A list of 25 items was finalized. The internal consistency, split-half reliability, test-retest reliability, construct validity, and discriminant validity of the new scale were satisfactory. The findings of this study are discussed in terms of implications for designing support system that respond to distinctive psychosocial stressors encountered by trainees who are the emerging backbone of the mental health support structure.

Keywords: Psychosocial stressors, supervisor related stressors, fears, apprehensions, workload, mental health, trainee clinical psychologists, reliability, validity.

Clinical psychology is regarded as a distinct field that holds a pre-eminent position as one of the most consequential subfields within the discipline of psychology (Rafiq et al., 2022). This field is dedicated to enhance overall well-being and attenuation of psychological distress of people (Gee et al., 2022). Passionate individuals who embark on this journey have to undergo a rigorous specialized training and trainees experience higher levels of distress which can be attributed to plethora of psychosocial stressors.

Psychosocial stressors refer to the negative life events or circumstances that may cause significant psychological or physiological stress response (Mullick et al., 2019). Moreover, psychosocial stressors are linked with adverse health outcomes and aggravation of mental health symptoms (Kostic et al., 2021). Around 42% clinical psychologists and psychiatrists in Pakistan manifested mild to severe distress (Shaheen & Sadiq, 2019). The prevalence of stress in trainee clinical psychologists was significantly higher than

their qualified and trained counterparts (Pakenham & Stafford-Brown, 2014).

Lazarus and Folkman's transactional theory of stress and coping (1984) elucidates a comprehensive framework of how people interpret and react to the psycho-social stressors (Obbarius et al., 2021). A person's cognitive evaluation of the stressors (primary appraisal) and understanding of availability of resources (secondary appraisal) significantly determine how a person will cope with stress (Afsono et al., 2021; Sakakibara & Endo, 2016). This phenomenon is referred to as cognitive appraisal (Horan et al., 2020). In regard to trainees, they encounter numerous emotionally exhausting psychosocial stressors like demanding nature and strenuous occupation with coursework, supervised clinical practicum, research responsibilities and direct engagement with individuals afflicted with diverse mental health conditions (Owen et al., 2021; Vollmer et al., 2013).

As a student, trainee clinical psychologists confront university related stressors like financial, academic, and social stressors (McIntyre et al., 2018). These particular stressors predict mental health problems in students like depression and anxiety (Asif et al., 2020). A pooled prevalence rate of depressive symptoms in Pakistani university students is approximately around 42.6% (Khan et al., 2021). Workload (caseload, working hours, mismanaged administrative work, and paperwork (case documentation) predicts emotional exhaustion and negativism towards work (Kotera et al., 2021; Hunt et al., 2025). Adding to this, 88% of the trainees experienced at least mild to moderate feelings of Impostor Syndrome and these feelings had a significant connectedness with perfectionism, anxiety, and depression (Tigranyan et al., 2021). Interestingly, intolerance for ambiguity was also identified as one of the stressors for trainees because during their training they encounter numerous situations that do not necessarily have a conspicuous answer (Pakenham & Stafford-Brown, 2014). These challenges are compounded by financial stressors as students with financial limitations avoided receiving mental healthcare services and spent a significant fragment of their day thinking about finances, resultantly, exhibiting elevated levels of depressive symptoms (Szkody et al., 2023). Adding to this, residence in hostels is linked to its own set of difficulties (distance from family, inadequate

hygiene, and unsatisfactory food quality) (Shrestha, 2023).

Alongside, these university related stressors, the trainee clinical psychologists have to meet the responsibilities of a mental health service provider which can be overwhelming. Principally, the first step is the cultivation of therapeutic bond (Tschuschke et al., 2020). Trainees can face enormous challenges that might erupt from individual differences in the personality characteristics, communication patterns, and attachment styles of client and therapist (O'Connor et al., 2019; Tschuschke et al., 2022). Resistance from clients obstructs the therapeutic alliance and delay attainment of therapeutic goals that can be very concerning for therapists (Schwartz et al., 2021). Moreover, the negative countertransference can evoke feelings of dislike towards the client and emotional withdrawal from the therapy (Gabbard, 2020). Adding on it to this, challenges related to ethical dilemmas can also contribute to stress and burnout (Mullen et al., 2017).

Amidst, these challenges trainees have to offer unwavering support to their clients by identifying with their emotions. Sadly, the professional duty of empathizing with the clients can lead to depletion of emotional resources of the client causing compassion fatigue and secondary traumatic responses (Laverdière et al., 2019; Munishvaran & Booyson, 2022). Perception action model of empathy postulated that empathy is a shared emotional experience when a person (subject) secondarily experiences the pain by automatically representing autonomic and somatic responses associated with a particular emotional state directly experienced by another person (object) (Osborne-Crowley et al., 2020; Pretson & De Waal, 2002). The discovery of mirror neurons by Giacomo Rizzolatti in 1988 became the bedrock of this model (Bekkali et al., 2021). This model puts forward a convincing explanation for personal distress and emotional burnout experienced by trainees when they experience stressful situations vicariously.

Furthermore, adverse experiences with supervisors included inconsistent supervision, insufficient support, incompetence of supervisor, and ambiguous expectations of the supervisors contributed to burnout in clinical psychology trainees (Weaver, 2020). Proctor's model of clinical supervision (1978) explains the pivotal

role of supervisors in fostering the professional growth of supervisees across three broad dimensions: normative, formative/educative, and restorative (Bradley and Becker, 2021). The normative domain pertains to the administrative responsibilities like allocating casework (clients), appraising, and guiding the supervisees (Natchaba, 2020). The formative domain entails the role of the supervisor as an educator (Snowdown et al., 2020). Lastly, the restorative domain requires supervisors to offer emotional support (Baldwin et al., 2022). This model is relevant, especially when negative working alliance with the supervisor can unfavorably affect the trainee's perception of their capabilities and competence (Morrison & Lent, 2018). In addition to this, the poor quality of clinical supervision foster disengagement related to work (Johnson et al., 2020). Therefore, given the exposure of trainees to myriad of psychosocial stressors it was imperative to develop a scale to measure this construct. Lastly, a limited indigenous research studies that were found used western tools in Pakistani population. Consequently, this research fills this methodological gap.

Methods

Phase I: Item generation

Participants and Procedure

In this phase, the experience and manifestation of psychosocial stressors from perspective of trainee clinical psychologists were explored. A sample of 10 trainee clinical psychologists (females = 8, males = 2), having the age range from 22-32 ($M = 26.7$; $SD = 2.11$), recruited through purposive sampling technique through various universities across Pakistan that offer clinical psychology training programs was interviewed. Individual interviews were conducted with all participants guided by phenomenological approach using open-ended interview. As part of this exploration, psychosocial stressors were operationally defined as "the psychological (emotional, cognitive, and behavioral) and social factors or situations that become the source of stress in a person's life that represents a person's inability to cope adequately with the negative situation that may contribute to psychological distress or maladaptive behaviors (Mullick et al, 2019 & VandenBos, 2015). The completion of individual interview typically required 15-20 minutes on average.

The participants were asked "As a trainee clinical psychologist, what type of social and psychological stressors do you generally face in your life". A series of open-ended questions were asked to ameliorate ambiguities. Following the completion of interviews, the qualitative data was transcribed and transformed into analyzable phrases by the researcher. A list of psychosocial stressors consisting of 54 items was generated in Urdu. Ambiguous items were removed and overlapping or repetitive items were merged. Consequently, a list of 34 items was established and it was named as "Trainee Clinical Psychologists' Stressors Scale (TCPSS)".

Phase II: Content Validity

Participants and Procedure

In this phase of the research study, content validity of TCPSS was determined. For this objective, 8 clinical psychologists with minimum four-years of experience in clinical research, teaching, or practice were approached. The experts were presented with the operational definition of psychosocial stressors and were expected to rate each item on the degree of relevance from 0 to 5, where 0, 1 and 2 were categorized as irrelevant whereas 3, 4, and 5 were categorized as relevant. Item level and scale level Content Validity Index (I-CVIs and S-CVI) were computed. Items that did not meet the I-CVIs threshold of 0.78 were disregarded (Lynn, 1986). Through this approach, five items were eliminated and 29 items were reserved to be used for pilot study and testing of psychometric properties. Moreover, averaging approach was employed to determine the S-CVI. TCPSS demonstrated exceptionally good S-CVI of 0.92 (Lynn, 1986). Eventually, TCPSS was transformed into self-report measure encompassing a 4-point rating scale 1 (Never) to 4 (Always).

Phase III: Pilot Study

Participants and Procedure

To determine the viability, feasibility, and user friendliness of the final scale a pilot study was conducted. The final Trainee Clinical Psychologists' Stressors Scale (TCPSS) was piloted on 20 trainees (females = 18; males= 2) within the age range of 22-32. To support further refinement, participants were encouraged to present their feedback on item clarity, lucidity of instructions and layout of TCPSS. Minor

problems were reported regarding the comprehensibility of the font style. Participants did not report any confusion or obscurity in any part of the measure.

Phase IV: Psychometric Properties

This phase was carried out to establish the psychometric properties of TCPSS.

Participants

A sample of 200 participants (females = 96%; males = 4%) from MS clinical psychology (96%), ADCP (4%), 2nd semester (40%), 3rd semester (34.5%), 4th semester (25.5%), adult placement (44%), special education placement (34.5%), community placement (21.5%) having the ages within 22-32 ($M = 24.90$; $SD = 1.96$), was recruited from various universities of Lahore offering training programs of clinical psychology. The participants were spending different hours at weekly clinical placements with majority completing 9-17 hours (56%) and the rest were engaged for 18-25 hours (44%). Mostly, participants were single (86.5%). Principally, the participants were residing in their homes (67.5%) rather than in hostel facilities and mainly participants belonged to nuclear family system (86%). The sample was selected through purposive sampling technique. The sample was gender disproportionate because of the predominant representation of women in this field. Trainees who did not have any practical exposure in psychological assessment and intervention in a clinical setting were excluded.

Measures

Demographic Information Sheet

A demographic information sheet required trainees' age, gender, marital status, program (MS Clinical Psychology or ADCP), current semester no., institute (private or public), residence (home/hostel), family system (nuclear or joint), family monthly income, area of current training (adult, child, community, or school), weekly placement hours, father's education, mother's education, father's occupation, and mother's occupation.

Trainee Clinical Psychologists' Stressors Scale (TCPSS)

Trainee Clinical Psychologists' Stressors scale (TCPSS) polished in pilot study was employed to

assess the psychosocial stressors. The scale consists of 29 items having a 4-point rating scale "1(*Never*), 2(*Often*), 3(*Mostly*), 4(*Always*)". The sum of each item's total score generated a score range of 29-116. Higher scores depict greater psychosocial stressors.

Mental Health Professionals' Stress Scale (MHPSS)

To establish construct validity of 'Trainee Clinical Psychologists' Stressors Scale (TCPSS)', a Western scale 'Mental Health Professionals' Stress Scale' was utilized. As the name suggests, this scale was designed to measure the stress levels of mental health professionals in England (Cushway et al., 1996). This scale consists of 42 items having a 4-point rating scale ranging from "0 (*Does not apply to me*) to 3 (*Does apply to me*)". The sum of scores on each item offered a score range of 0-120. Higher scores represent elevated levels of stress. MHPSS was found to exhibit strong psychometric properties (Cushway et al., 1996).

Satisfaction with Life Scale (SWLS)

To determine discriminant validity of 'Trainee Clinical Psychologists' Stressors Scale (TCPSS)', an Urdu translation of 'Satisfaction with Life Scale' was considered (Butt et al., 2014). Diener and colleagues 1985, initially developed this scale and later on it was translated into multiple languages. This scale consists of five items with a 7-point rating scale ranging from "0 (*Not at all agree*) to 7 (*Strongly disagree*)". The sum of scores on each item yielded a score range of 0-35. Higher scores represent greater satisfaction with life. SWLS was found to have strong psychometric properties (Butt et al., 2014).

Procedure

After obtaining ethical approval from Institutional Review Board (IRB) a list of public and private institutions in Lahore was obtained that offer MS clinical psychology and ADCP. Permissions were sought from the concerned authorities in the selected universities. Some participants were approached in their departments. The purpose of the study was elucidated by the researcher to the participants in Urdu. Voluntary participation was ensured. Moreover, the participants were informed about their right to withdraw at any time and also about their confidentiality. The consent form,

demographic sheet and questionnaires were given to the participants. The protocol was filled in group settings as well as in individual setting. The expected time to fill the questionnaire was around 10-15 minutes on average. The researcher answered queries put forward by the participants. Lastly, suggestions given by the participants were also respected. Furthermore, the scale was administered on 10% (n= 20) participants after a one-week interval to establish the test-retest reliability of the TCPSS.

Results

Factor Analysis of Psychosocial Stressors of Trainee Clinical psychologists

In pursuit of ascertaining the dimensionality of

TCPSS, Exploratory Factors Analysis (EFA) with Promax rotation applying Principal Axis Factoring (PAF) as the extraction method, was conducted on the participants. The number of participants were determined in accordance with the criterion proposed by Tabachnick and Fidell (2007). The criterion recommended the participant to item ratio of 5:1 for rigorous factorial analysis. Initial Cronbach's alpha for TCPSS was .92. The Kaiser-Meyer-Olkin (KMO) of sample adequacy delivered a score of .90. The Bartlett's Test of Sphericity was also determined to be highly significant ($p < .001$). These values indicate that it was suitable to analyze this data through factor analysis (Field, 2013).

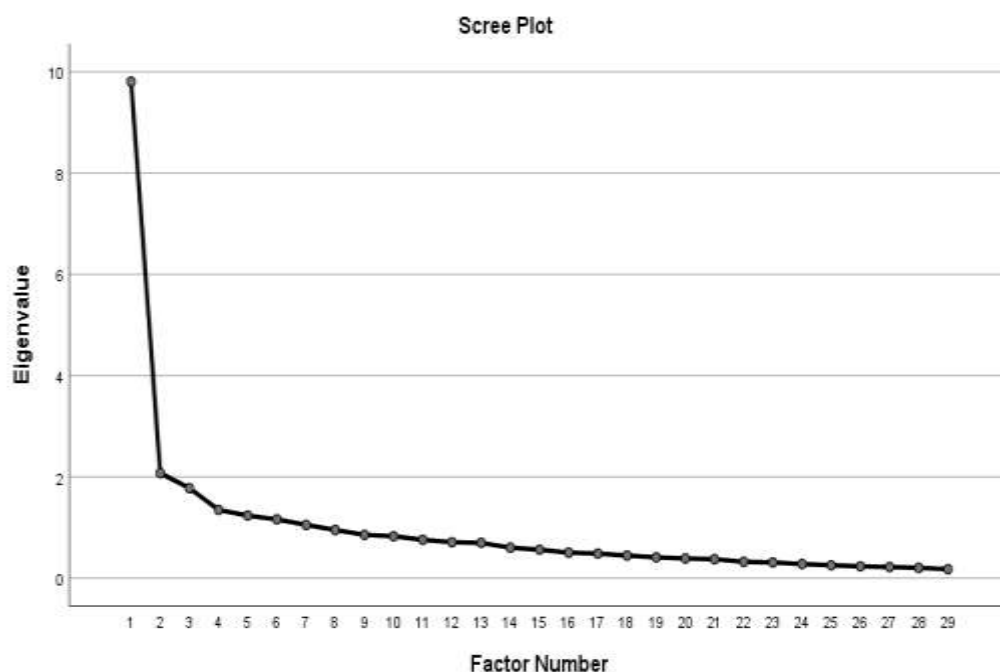


Figure 1. Scree plot showing extraction of factors of TCPSS.

Indicators utilized to explore the number of factors in TCPSS were factor loading $\geq .30$ and Eigenvalue > 1 on that distinct factor (Kline, 1994; Tabachnik & Fidell, 2013). Therefore, in accordance with the retention criteria (Kaiser-Guttman's rule), initial solution of seven factors was considered as acceptable (Kaiser, 1974). The dimensions were then reduced in an effort to locate best structure with more interpretable results and least dubious items. Further, analysis

revealed that three-factors solution exhibit most meaningful results for the underlying structure of the data. Hence, it was preferred as the best-fit model. Therefore, Exploratory Factor Analysis (EFA) with Promax Rotation was performed on 29 items of TCPSS with three-factor solution. Four items were discarded as they did not display appropriate loading on any factor (10, 13, 26, and 27). The factor loadings of 25 items are listed in Table 1.

Table 1

Factor Loadings of 25 Items of Trainee Clinical Psychologists Stressors Scale through Promax Rotation (N =200)

Sr. No	Item No.	FI	FII	FIII
1.	1	.56	-.06	.14
2.	2	.38	.03	.00
3.	3	.86	-.06	-.14
4.	5	.47	.27	.06
5.	6	.91	-.18	-.07
6.	9	.57	.17	-.08
7.	20	.72	-.04	-.08
8.	24	.62	.02	.25
9.	25	.63	.21	-.09
10.	7	-.01	.54	.04
11.	8	.05	.68	-.05
12.	11	-.06	.95	-.15
13.	12	.36	.46	-.07
14.	19	.18	.39	.27
15.	21	.43	.41	-.05
16.	22	.10	.40	.17
17.	28	-.26	.35	.44
18.	29	-.03	.77	.10
19.	4	.10	.08	.42
20.	14	.14	-.22	.75
21.	15	.32	-.18	.56
22.	16	-.18	.15	.55
23.	17	-.12	.11	.45
24.	18	.22	.19	.41
25.	23	-.08	-.05	.67
Eigen Values		9.27	1.51	1.26
% of Variance		31.98	5.20	4.36
Cumulative %		31.98	37.18	41.53

Note. Factor loadings >.35 are boldfaced; FI = supervisor related stressor; FII = fears and apprehensions, FIII = workload related stressors.

The results reported in Table 1 highlighted that 25 items of TCPSS could be categorized under three salient factors labeled as supervisor related stressors, fears and apprehensions, and workload related stressors.

Factors Description of Trainee Clinical Psychologists Stressors Scale

Factor 1: Supervisor Related Stressors

The supervisors play a quintessential role in the personal and professional development of trainee clinical psychologists. Based on the phenomenological studies, the supervisor related stressors are represented by lack of perceived guidance or mentorship from the supervisor, insufficient emotional and professional support offered by supervisor, distrust in supervisor's competencies, inadequate feedback, and lack of

respectful interactions made by the supervisors (Weaver, 2020). The items retained in this factor, depict the experiences of trainees' unpleasant interactions with their supervisors. This factor contains nine items in total (1, 2, 3, 5, 6, 9, 20, 24, & 25). Lastly, higher score in this factor represents more psychosocial stressors.

Factor 2: Fears and Apprehensions

Fears are characterized by arousal of intense negative and unpleasant emotions related to certain situations that might be perceived as threatening (Raber et al., 2019). Whereas, apprehensions refer to general feelings of discomfort and uneasiness related to anticipated events (Agrawal & Krishna, 2021). The trainee clinical psychologists reported to have fears and apprehensions related to repeating placements,

not being able to complete degree requirements on time, poor grades, not getting clients on time, and career prospects. This factor consists of nine items in total (7, 8, 11, 12, 19, 21, 22, 28, & 29). Statistically, item no. 28 loaded higher on factor 3, but considering its thematic content it was retained in factor 2.

Factor 3: Workload Related Stressors

This dimension within the scale encapsulates a range of stressors associated with extensive and arduous training of aspiring clinical psychologists, like difficulty in managing course-work along with

caseload, difficulty in making case reports, not having enough time for self-care and family, along with insufficient time to sleep. These items represent the burden experienced by trainee clinical psychologists that creates a state of imbalance in work and personal life. Previous studies have established that excessive workload is a significant risk factor of depressive symptomology in graduate students of clinical psychology (Rummell, 2015). This factor consists of seven items in total (4, 14, 15, 16, 17, 18, & 23).

Inter-factors Correlation

Table 2

Correlation, Mean, Standard Deviations, and Cronbach's Alpha of Subscales of Trainee Clinical Psychologists Stressors Scale (N = 200)

Factors	M	SD	1	2	3
1. SRS	22.64	6.84	-	-	-
2. FAA	22.70	6.68	.65***	-	-
3. WRS	22.31	4.31	.55***	.58***	-

Note. SRS = supervisor related stressors; FAP = fears and apprehensions; WRS = workload related stressors. *** $p < .001$

Table 2, revealed that supervisor related stressors had a highly significant relationship with fears and apprehensions ($r = .65$, $p < .001$) and workload related stressors ($r = .55$, $p < .001$). Moreover, fears and apprehensions also had a moderate and highly significant association with workload related stressors ($r = .58$, $p < .001$).

Reliability of Trainee Clinical Psychologists Stressors Scale (TCPSS)

Test-retest reliability was assessed over a one-week interval. A sample of 10% ($n = 20$) participants filled out the measure at two time points yielding a significant test-retest reliability ($r = .75$, $p < .001$) of TCPSS. Furthermore, split-half reliability was calculated using odd-even method. The results corroborated strong split half reliability ($r = .89$, $p < .001$) of TCPSS.

Validity of Trainee Clinical Psychologists Stressors Scale (TCPSS)

Construct validity of the TCPSS was confirmed by using a western scale 'Mental health Professionals Stress Scale' (Cushway et al., 1996). The results revealed a significant and a positive association between the two scales indicating satisfactory construct validity ($r = .65$, $p < .01$). To determine

discriminant validity of 'Trainee Clinical Psychologists Stressors Scale', an Urdu translation of 'Satisfaction with Life Scale' was considered (Butt et al., 2014). The results revealed a significant and a negative association between the two scales indicating excellent discriminant validity ($r = -.85$, $p < .001$).

Discussion

In the broader framework of human existence, experiencing psychological and social stressors is a natural feature of life. Psychosocial stressors refer to the stress inducing acute or recurrent stimuli that might be internal or external (Gillyard et al., 2023). These adversities having psychological and social origin, have a strong association with stress-related symptoms (Duchaine et al., 2020). Nevertheless, psychosocial stressors cannot be fully explored without conceding the influential role of culture. Research in cultural psychology has advocated that diverse social orientations in varied cultures frame how people perceive different situations (Lee et al., 2023). Correspondingly, diversification in psychological symptoms across cultures can be attributed to culturally conditioned emotional scripts (Chentsova-Dutton et al., 2019). Therefore, in

light of this essential role of culture it was indispensable to explore expression of psychosocial stressors of trainee clinical psychologists in Pakistan. Hence, to address this objective, a 4-point rating scale labeled as 'Trainee Clinical Psychologists Stressors Scale (TCPSS)' was developed.

Exploratory Factor Analysis of TCPSS revealed three factors of TCPSS named as supervisor-related stressors, fears and apprehensions, and workload-related stressors. In context of supervisor/supervisee relationship 'Proctor's model of clinical supervision (1978)' indicates that supervisees expect professional guidance, administrative competency, and emotional support from their supervisors (Styles et al., 2023). Therefore, when supervisees perceive lack of support and consistent guidance their working alliance with supervisor is negatively affected (Hutman et al., 2023). Additionally, negative experiences with supervisors are associated with stress, burnout, worry, shame, and self-doubt (Morrison & Lent, 2018; Martin et al., 2021; Tu et al., 2023).

Moreover, the fears and apprehensions emerged as a highlighting feature of this indigenous measure. The trainee clinical psychologists had multiple academic fears and apprehensions like getting poor grades, repeating placement, and not being able to complete degree requirements on time. This variation can be attributed to the cultural expectations surrounding academic and personal achievement. Asian parents emphasize more on academic achievement and they tend to have higher expectations and standards for their children pertaining to educational success (Talha et al., 2020). This emphasis on academic achievement in collectivist culture can also be attributed to sense of collective achievement and family honor (Rasool et al., 2021).

Furthermore, unrealistic academic standards and expectations are linked with psychological problems in students (Wang et al., 2015). Additionally, a significant proportion of university students demonstrate low self-efficacy that is linked to heightened academic stress and fear of failure (Chuang et al., 2022; Kamal et al., 2020). Resultantly, despite having slightly higher factor loading on factor 1 (0.43), item no.21 (failing to meet internal expectations) was moved to factor 2 (0.41), due to stronger conceptual alignment with factor 2. Interestingly, trainee clinical

psychologists also displayed fear and apprehension related to job opportunities as represented by item no. 28, which was moved to factor 2, despite having higher loading for workload related stressors based on its thematic content. Exploration of future anxieties in students revealed that along with fear of academic failure, students are also very apprehensive about not securing a good job, primarily because of the constrained job opportunities (Eleftheriades et al., 2020; Hammad, 2016).

In addition to fears and apprehensions, work demands of the training of becoming a clinical psychologist can be very challenging to navigate. The Job Demands-Resources model of burnout (2001) explains the negative effects of excessive workload (job demand) and depleting resources on the mental health of individuals (Tummers & Baker, 2021). The trainee clinical psychologists recruited in this study reported to have insufficient time for self-care, sleep, and family because of being overburdened by work. The workload is a key contributor to stress in trainee clinical psychologists (Cushway & Tyler, 1996; Jones & Thompson, 2017). Lastly, validity of the scale corresponds with the literature which suggested that psychosocial stressors not only escalate psychological stress but also cause a simultaneous reduction in overall satisfaction with life (Gungor et al., 2021; Hill et al., 2022; Marum et al., 2014).

Limitations and Recommendations

This study has numerous implications that extend to professional community, universities, mental health facilities, and campus counselors. Despite its strengths, a salient limitation of this study was centered on demographic composition of the sample. The sample was gender disproportionate and the participants predominantly belonged to MS Clinical Psychology program, private universities, and nuclear family system limiting the generalizability of the results. Moreover, the geographical scope of this research project was limited as the data was collected solely from universities of Lahore. Furthermore, the accuracy of data collected through self-report measures can be compromised owing to the proclivity of producing socially desirable responses, stigma centered around mental health, and lack of insight about oneself. Lastly, cross-sectional

research design was adopted, future projects might implement longitudinal research design to study psychosocial stressors over an extended duration.

Conclusion

The present study marks a novel contribution to mental health care framework of Pakistan by developing and validating a tool to determine psychosocial stressors of trainee clinical psychologists. While psychosocial stressors are globally recognized, their manifestation can vary across cultures. This reliable and valid tool will pave the way for development of the stress-management programs and policies that would enhance the overall well-being of trainee clinical psychologists and would eventually; prepare them to be the pillars of mental health system in Pakistan.

Data availability statement:

The data supporting the findings of this study are available from the corresponding author upon reasonable request. However, access may be limited due to institutional policy and ethical considerations, as the data were collected under the research protocol of the University of Management and Technology, Lahore.

Acknowledgements:

The authors extend sincere gratitude to the University of Management and Technology for providing institutional support. Appreciation is also extended to all the participants for their time and cooperation, which made this research possible. This research received no external funding.

Authors' Current Affiliations

Ms. Amna Noor is presently working as a consultant pediatric child psychologist at RehabCare, Lahore, Pakistan.

Ms. Hadiqa Rehman is currently serving as a consultant clinical psychologist at The Fairway Clinic: Psychconsultants, Lahore, Pakistan.

REFERENCES

- Afonso, R. M. B., Pérez-Nebra, A. R., Modesto, J. G., & Zambonato, A. (2022). Negative events, coping and biological markers: An application of transactional model of stress. *Psicologia: Teoria e Pesquisa*, 38. <http://dx.doi.org/10.1590/0102.3772e38520.en>
- Agrawal, S., & Krishna, S. M. (2021). Communication apprehension and psychological well-being of students in online learning. *Behavioral Sciences*, 11(11), 145. <https://doi.org/10.3390/bs11110145>
- Asif, S., Mudassar, A., Shahzad, T. Z., Raouf, M., & Pervaiz, T. (2020). Frequency of depression, anxiety and stress among university students. *Pakistan. Journal of Medical Sciences*, 36(5), 971. <https://doi.org/10.12669/pjms.36.5.1873>
- Butt, G. (2014). *Urdu Translation of Satisfaction with Life Scale*. [Unpublished master's thesis]. Government College University, Lahore
- Baldwin, S., Coyne, T., & Kelly, P. (2022). Supporting nursing, midwifery and allied health professional teams through restorative clinical supervision. *British Journal of Nursing*, 31(20), 1058-1062. <https://doi.org/10.12968/bjon.2022.31.2.0.1058>
- Bekkali, S., Youssef, G. J., Donaldson, P. H., Albein-Urios, N., Hyde, C., & Enticott, P. G. (2021). Is the putative mirror neuron system associated with empathy? A systematic review and meta-analysis. *Neuropsychology Review*, 31, 14-57. <https://doi.org/10.1007/s11065-020-09452-6>
- Bradley, W. J., & Becker, K. D. (2021). Clinical supervision of mental health services: A systematic review of supervision characteristics and practices associated with formative and restorative outcomes. *The Clinical Supervisor*, 40(1), 88-111. <https://doi.org/10.1080/07325223.2021.1904312>
- Cushway, D., & Tyler, P. (1996). Stress in clinical psychologists. *International Journal of Social Psychiatry*, 42(2), 141-149. <https://psycnet.apa.org/doi/10.1177/002076409604200208>

- Cushway, D., Tyler, P. A., & Nolan, P. (1996). Development of a stress scale for mental health professionals. *British Journal of Clinical Psychology*, 35(2), 279-295.
<https://doi.org/10.1111/j.2044-8260.1996.tb01182.x>
- Chuang, Y. T., Huang, T. H., Lin, S. Y., & Chen, B. C. (2022). The influence of motivation, self-efficacy, and fear of failure on the career adaptability of vocational school students: Moderated by meaning in life. *Frontiers in Psychology*, 13.
<https://doi.org/10.3389/fpsyg.2022.958334>
- Chentsova-Dutton, Y., & Maercker, A. (2019). Cultural scripts of traumatic stress: outline, illustrations, and research opportunities. *Frontiers in psychology*, 10, 2528.
<https://doi.org/10.3389/fpsyg.2019.02528>
- Duchaine, C. S., Aube, K., Gilbert-Ouimet, M., Vezina, M., Ndjaboue, R., Massamba, V., Talbot, D., Lavinge-Robichaud, M., Trudel, X., Pena-Gralle, A. B., Lesage, A., Moore, L., Milot, A., Lauren, D., & Brisson, C. (2020). Psychosocial stressors at work and the risk of sickness absence due to a diagnosed mental disorder: a systematic review and meta-analysis. *JAMA Psychiatry*, 77(8), 842-851.
<https://doi.org/10.1001/jamapsychiatry.2020.0322>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
<http://dx.doi.org/10.1037/0021-9010.86.3.499>
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
<https://doi.org/10.1207/s15327752jpa490113>
- Eleftheriades, R., Fiala, C., & Pasic, M. D. (2020). The challenges and mental health issues of academic trainees. *F1000Research*, 9, 104.
<https://doi.org/10.12688/f1000research.21066.1>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Washington, DC: Sage.
- Gungor, A., Young, M. E., & Sivo, S. A. (2021). Negative life events and psychological distress and life satisfaction in US college students: The moderating effects of optimism, hope, and gratitude. *Journal of Pedagogical Research*, 5(4), 62-75.
<https://dx.doi.org/10.33902/JPR.2021472963>
- Gee, D. G., DeYoung, K. A., McLaughlin, K. A., Tillman, R. M., Barch, D. M., Forbes, E. E., Krueger, R. F., Strauman, T. J., Weierich, M. R., & Shackman, A. J. (2022). Training the next generation of clinical psychological scientists: A data-driven call to action. *Annual Review of Clinical Psychology*, 18, 43-70.
<https://doi.org/10.1146%2Fannurev-clinpsy-081219-092500>
- Gabbard, G. O. (2020). The role of countertransference in contemporary psychiatric treatment. *World Psychiatry*, 19(2), 243.
<https://doi.org/10.1002%2Fwps.20746>
- Gillyard, T., Davis, J., Parham, I., Moss, J., Barre, I., Alexander, L., & Cunningham-Erves, J. (2023). Psychosocial stressors and coping strategies among African Americans during early stages of the COVID-19 pandemic: A qualitative study. *Journal of Racial and Ethnic Health Disparities*, 10(1), 373-386.
<https://doi.org/10.1007/s40615-022-01229-2>
- Hutman, H., Ellis, M. V., Moore, J. A., Roberson, K. L., McNamara, M. L., Peterson, L. P., Taylor, E. J., & Zhou, S. (2023). Supervisees' perspectives of inadequate, harmful, and exceptional clinical supervision: Are we listening? *The Counseling Psychologist*, 51(5), 719-755.
<https://doi.org/10.1177/00110000231172504>
- Hunt, M. G., Aggarwal, P., Bootes, K., Cummings, J., Daniel, K. E., Davila, J., Kapouleas, E. A., Larson, C. L., & Maranzan, K. A. (2025). Report of the Council of University Directors of Clinical Psychology (CUDCP) burnout task force: Workload, burnout, and emotional health in clinical psychological trainees. *Training and Education in Professional Psychology*,

- 19(2), 85-96.
<https://doi.org/10.1037/tep0000496>
- Hill, N. T., Bailey, E., Benson, R., Cully, G., Kirtley, O. J., Purcell, R., Rice, S., Robinson, J., & Walton, C. C. (2022). Researching the researchers: psychological distress and psychosocial stressors according to career stage in mental health researchers. *BMC psychology*, 10(1), 19. <https://psycnet.apa.org/doi/10.1186/s40359-022-00728-5>
- Horan, K. A., Nakahara, W. H., DiStaso, M. J., & Jex, S. M. (2020). A review of the challenge-hindrance stress model: Recent advances, expanded paradigms, and recommendations for future research. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.560346>
- Hammad, M. A. (2016). Future anxiety and its relationship to students' attitude toward academic specialization. *Journal of Education and Practice*, 7(15), 54-65. <https://doi.org/10.1177/0143034316678447>
- Johnson, J., Corker, C., & O'Connor, D. B. (2020). Burnout in psychological therapists: A cross-sectional study investigating the role of supervisory relationship quality. *Clinical Psychologist*, 24(3), 223-235. <https://doi.org/10.1111/cp.12206>
- Jones, R. S., & Thompson, D. E. (2017). Stress and well-being in trainee clinical psychologists: A qualitative analysis. *Medical Research Archives*, 5(8). <https://api.semanticscholar.org/CorpusID:148731390>
- Kamal, E., Fahd, S., Bhatti, R. J., & Bhukhari, F. K. (2020). Self-efficacy and academic stressors in university students. *IUB Journal of Social Sciences*, 2(1), 13-21. <https://journals.iub.edu.pk/index.php/jss>
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36. <https://psycnet.apa.org/doi/10.1007/BF02291575>
- Kostić, J., Žikić, O., Đorđević, V., & Krivokapić, Ž. (2021). Perceived stress among university students in south-east Serbia during the COVID-19 outbreak. *Annals of General Psychiatry*, 20, 1-8. <https://doi.org/10.1186/s12991-021-00346-2>
- Khan, M. N., Akhtar, P., Ijaz, S., & Waqas, A. (2021). Prevalence of depressive symptoms among university students in Pakistan: a systematic review and meta-analysis. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.603357>
- Kline, P. (1994). *An easy guide to factor analysis*. London: Routledge.
- Kotera, Y., Maxwell-Jones, R., Edwards, A. M., & Knutton, N. (2021). Burnout in professional psychotherapists: Relationships with self-compassion, work-life balance, and telepressure. *International Journal of Environmental Research and Public Health*, 18(10). <https://doi.org/10.3390/ijerph18105308>
- Lee, H., Masuda, T., Ishii, K., Yasuda, Y., & Ohtsubo, Y. (2023). Cultural differences in the perception of daily stress between European Canadian and Japanese undergraduate students. *Personality and Social Psychology Bulletin*, 49(4), 571-584. <https://doi.org/10.1177/01461672211070360>
- Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing research*, 35(6), 382-386. <https://psycnet.apa.org/doi/10.1097/00006199-198611000-00017>
- Laverdière, O., Kealy, D., Ogrodniczuk, J. S., Chamberland, S., & Descôteaux, J. (2019). Psychotherapists' Professional quality of life. *Traumatology*, 25(3), 208. <https://psycnet.apa.org/doi/10.1037/trm0000177>
- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal and Coping*. New York, NY: Springer Publishing Company.
- Marum, G., Clench-Aas, J., Nes, R. B., & Raanaas, R. K. (2014). The relationship between negative life events, psychological distress and life satisfaction: a population-based study. *Quality of Life Research*, 23, 601-611. <https://doi.org/10.1007/s11136-013-0512-8>

- McIntyre, J. C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall, R. P. (2018). Academic and non-academic predictors of student psychological distress: The role of social identity and loneliness. *Journal of Mental Health*, 27(3), 230-239.
<https://doi.org/10.1080/09638237.2018.1437608>
- Munishvaran, K., & Booysen, D. D. (2022). The experiences of clinical psychologists in treating traumatic stress at a tertiary psychiatric hospital in the Eastern Cape: A qualitative study. *South African Journal of Psychiatry*, 28.
<https://doi.org/10.4102%2Fsajpsychiatry.v28i0.1868>
- Morrison, M. A., & Lent, R. W. (2018). The working alliance, beliefs about the supervisor, and counseling self-efficacy: Applying the relational efficacy model to counselor supervision. *Journal of Counseling Psychology*, 65(4), 512.
<https://psycnet.apa.org/doi/10.1037/cou0000267>
- Mullick, M. S., Algin, S., Islam, M., Phillipson, A., Nahar, J. S., Morshed, N. M., Chowdhary, H. R., & Shahid, S. F. B. (2019). Dhaka stress scale-adolescent: A scale for assessing psychosocial stressors among adolescents. *Bangabandhu Sheikh Mujib Medical University Journal*, 12(4), 167-176.
<https://doi.org/10.3329/bsmmuj.v12i4.44273>
- Martin, P., Lizarondo, L., Kumar, S., & Snowdon, D. (2021). Impact of clinical supervision on healthcare organisational outcomes: A mixed methods systematic review. *PloS One*, 16(11).
<https://doi.org/10.1371/journal.9544.2012.00070.x>
- Mullen, P. R., Morris, C., & Lord, M. (2017). The experience of ethical dilemmas, burnout, and stress among practicing counselors. *Counseling and Values*, 62(1), 37-56.
<http://dx.doi.org/10.1002/cvj.12048>
- Natchaba, N. (2020). *Evaluating the effectiveness of clinical supervision in the care coordination workforce*. [Unpublished doctoral thesis]. St. John Fisher University.
- Owen, J., Crouch-Read, L., Smith, M., & Fisher, P. (2021). Stress and burnout in improving access to psychological therapies (IAPT) trainees: a systematic review. *The Cognitive Behaviour Therapist*, 14(20).
<https://doi.org/10.14349/rtp.2019.v51.n3.6>
- Osborne-Crowley, K., Wilson, E., De Blasio, F., Wearne, T., Rushby, J., & McDonald, S. (2020). Empathy for people with similar experiences: Can the perception-action model explain empathy impairments after traumatic brain injury?. *Journal of Clinical and Experimental Neuropsychology*, 42(1), 28-41.
<https://doi.org/10.1080/13803395.2019.1662375>
- Obbarius, N., Fischer, F., Liegl, G., Obbarius, A., & Rose, M. (2021). A modified version of the transactional stress concept according to Lazarus and Folkman was confirmed in a psychosomatic inpatient sample. *Frontiers in Psychology*, 12.
<https://doi.org/10.3389/fpsyg.2021.584333>
- O'Connor, S., Kivlighan Jr, D. M., Hill, C. E., & Gelso, C. J. (2019). Therapist-client agreement about their working alliance: Associations with attachment styles. *Journal of Counseling Psychology*, 66(1), 83.
<https://doi.org/10.1037/cou0000303>
- Proctor, B. (1987). *Supervision: A cooperative exercise in accountability. Enabling and ensuring. Supervision in practice.*
- Pakenham, K., & Stafford-Brown, J. (2012). Stress in clinical psychology trainees: A review of current research and future directions. *Australian Psychologist*, 47, 147-155.
<https://doi.org/10.1111/j.1742-9544.2012.00070.x>
- Preston, S. D., & De Waal, F. B. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences*, 25(1), 1-20.
<https://doi.org/10.1017/s0140525x02000018>

- Rummell, C. M. (2015). An exploratory study of psychology graduate student workload, health, and program satisfaction. *Professional Psychology: Research and Practice*, 46(6), 391. <https://psycnet.apa.org/doi/10.1037/pro0000056>
- Rafiq, M., Zareen, G., Khalid, A., Chahal, F. M., Maqbool, T., & Hadi, F. (2022). Clinical and neuropsychology in pakistan: challenges and wayforward. *Pak-Euro Journal of Medical and Life Sciences*, 5(1), 119-128. <http://dx.doi.org/10.31580/pjmls.v5i1.2442>
- Rizzolatti, G., Camarda, R., Fogassi, L., Gentilucci, M., Luppino, G., & Matelli, M. (1988). Functional organization of inferior area 6 in the macaque monkey: II. Area F5 and the control of distal movements. *Experimental Brain Research*, 71, 491-507. <https://doi.org/10.1007/BF00248742>
- Raber, J., Arzy, S., Bertolus, J. B., Depue, B., Haas, H. E., Hofmann, S. G., & Boutros, S. W. (2019). Current understanding of fear learning and memory in humans and animal models and the value of a linguistic approach for analyzing fear learning and memory in humans. *Neuroscience & Biobehavioral Reviews*, 105, 136-177. <https://doi.org/10.1016/j.neubiorev.2019.03.015>
- Rupert, P. A., Miller, A. O., & Dorociak, K. E. (2015). Preventing burnout: What does the research tell us?. *Professional Psychology: Research and Practice*, 46(3), 168. <https://psycnet.apa.org/doi/10.1037/a0039297>
- Rasool, S., Zhang, J., Aydin, H., & Halpern, C. (2021). The impact of South Asian prenatal involvement behaviors on children's academic achievement: Instrument development and exploratory factor analysis. *New Waves-Educational Research and Development Journal*, 24(1), 21-52. <https://doi.org/10.3389/fpsyg.2021.977678>
- Snowdon, D. A., Sargent, M., Williams, C. M., Maloney, S., Caspers, K., & Taylor, N. F. (2020). Effective clinical supervision of allied health professionals: a mixed methods study. *BMC Health Services Research*, 20(1), 1-11. <https://doi.org/10.1186/s12913-019-4873-8>
- Szkody, E., Hobaica, S., Owens, S., Boland, J., Washburn, J. J., & Bell, D. (2023). Financial stress and debt in clinical psychology doctoral students. *Journal of Clinical Psychology*, 79(3), 835-853. <https://doi.org/10.1002/jclp.23451>
- Styles, M., Schafheutle, E., Willis, S., & Shaw, M. (2023). Pharmacy professionals' perceptions of educational supervision in primary care through the lens of Proctor's model. *BMC Medical Education*, 23(1), 503. <https://doi.org/10.1186/s12909-023-04398-8>
- Schwartz, R. A., Chambless, D. L., Milrod, B., & Barber, J. P. (2021). Patient, therapist, and relational antecedents of hostile resistance in cognitive-behavioral therapy for panic disorder: A qualitative investigation. *Psychotherapy*, 58(2), 230. <https://doi.org/10.1037%2Fpst0000308>
- Sakakibara, R., & Endo, T. (2016). Cognitive appraisal as a predictor of cognitive emotion regulation choice. *Japanese Psychological Research*, 58(2), 175-185. <https://doi.org/10.1111/jpr.12098>
- Shrestha, R., Timalisina, S., Shakya, R., Shrestha, N., Kotera, Y., Hashemy, T., & Ozaki, (2023). Stress and coping mechanism among students residing in private school hostels. *Mental Illness*, 2023. <https://doi.org/10.1155/2023/6535583>
- Shaheen, S., & Sadiq, M. (2019). Distress and professional quality of life among clinical psychologists and psychiatrists. *The International Journal of Indian Psychology*, 7(1), 33. <https://doi.org/10.1007/s10879-021-09527-2>
- Tabachnik, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. New York: Harper Collins.
- Tabachnik, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. New York: Harper Collins.

- Tu, B., Huang, C., Sitar, S., & Wang, Y. (2023). Supervision effects on negative affect and psychological distress: Evidence from social workers in China. *International Journal of Environmental Research and Public Health*, 20(3), 1764.
<https://doi.org/10.3390/ijerph20031764>
- Tummers, L. G., & Bakker, A. B. (2021). Leadership and job demands-resources theory: A systematic review. *Frontiers in Psychology*, 12.
<https://doi.org/10.3389/fpsyg.2021.722080>
- Talha, M. A., Qi, X., & Rizwan, M. (2020). Cultural impact of perceived parental expectations on students' academic stress. *Annals of Social Sciences and Perspective*, 1(2), 53-65.
<https://doi.org/10.52700/assap.v1i2.25>
- Tigranyan, S., Byington, D. R., Liupakorn, D., Hicks, A., Lombardi, S., Mathis, M., & Rodolfa, E. (2021). Factors related to the impostor phenomenon in psychology doctoral students. *Training and Education in Professional Psychology*, 15(4), 298-305.
<https://doi.org/10.1037/tep0000321>
- Tschuschke, V., Koemeda-Lutz, M., von Wyl, A., Cramer, A., & Schulthess, P. (2020). The impact of patients' and therapists' views of the therapeutic alliance on treatment outcome in psychotherapy. *The Journal of Nervous and Mental Disease*, 208(1), 56-64.
<https://doi.org/10.1097/nmd.0000000000000111>
- Tschuschke, V., Koemeda-Lutz, M., Von Wyl, A., Cramer, A., & Schulthess, P. (2022). The impact of clients' and therapists' characteristics on Therapeutic alliance and outcome. *Journal of Contemporary Psychotherapy*, 52(2), 145-154.
<https://doi.org/10.1007/s10879-021-09527-2>
- VandenBos, G. R. (Ed.). (2015). *APA dictionary of psychology* (2nd ed.). American Psychological Association.
<https://doi.org/10.1037/14646-000>
- Vollmer, S., Spada, H., Caspar, F., & Burri, S. (2013). Expertise in clinical psychology. The effects of university training and practical experience on expertise in clinical psychology. *Frontiers in Psychology*, 4, 141.
<https://doi.org/10.3389/fpsyg.2013.00141>
- Weaver, A. (2020). **Clinical trainees' experience of burnout and its relationship to supervision.** [Unpublished doctoral dissertation]. National Louis University.
- Wang, M., Fan, C., Xue, N., & Zhou, Z. (2015). Home stressors influence adolescents' Depressive symptoms: Rumination as a mediator. *Journal of Psychological Science*, 38(6), 1398-1403.
<https://doi.org/10.1177/0143034316678447>