Asia-Pacific Consortium of Researchers and Educators, Inc. APCORE Online Journal Volume 1, Issue 1, 2025



## Research Article

# Development and Validation of Stress-Related Tool for Continuing Professional Education (CPE) Students in the Post Pandemic Era

Maria Imelda M. Villaroman<sup>1</sup>; John Jason M. Villaroman<sup>2</sup>; Cheena B. Mallari<sup>3</sup>; Jackielyn L. Dela Cruz<sup>4</sup>; Mark Jason S. Domingo<sup>5</sup>

1,2,3,4,5 Wesleyan University- Philippines

Correspondence should be addressed to \*Corresponding Author; cbmallari@wesleyan.edu.ph

#### **ABSTRACT**

Stress can be helpful and stimulating if mild and well-managed. It stimulates the thinking processes and helps people stay alert and be productive and do their daily tasks. It can also result in personal growth and facilitate development. However, how people react to stress depends on how they view and evaluate the impact of the stressor, its effect on their situation and support at the time of the stress, and their usual coping mechanisms. According to Yazdani (2010), stress is a multidimensional phenomenon which is focused on dynamic between individual and environment and because of the magnitude of stress to students, it is vital and timely to understand how this phenomenon can affect our aspiring teachers. The development of the stress-related tool was anchored on a relevant framework that indicated internal and external stressors and validation of this tool using a quantitative correlational design was applied. Findings of this study have revealed that students of Professional Continuing Education (CPE) experience a higher stress level to both internal and external factors and that there is a significant relationship between stress and sex, civil status and monthly family income. Recommendations focus on the development of stress management and empowerment program that will ensure their holistic well-being despite the challenges of the dynamic trends of the current educational landscape.

Keywords: Continuing professional education, post-pandemic era, stress, stress-related tool

### 1. INTRODUCTION

The post-pandemic era has introduced unprecedented challenges to the educational landscape, particularly for adult learners engaged in Continuing Professional Education (CPE). These students, who often balance academic responsibilities with professional and personal obligations, face heightened stress levels due to both internal and external factors. Stress among CPE students are exacerbated by the lingering effects of the pandemic, including economic instability, shifts in educational delivery methods, and increased academic pressure. Such stress can significantly impact their psychological well-being, academic performance, and overall quality of life.

Stress assessment tools have traditionally focused on younger, full-time students in higher education institutions. However, these tools often fail to capture the unique stressors experienced by adult learners in CPE programs. Traditional methods of stress evaluation, such as self-assessment scales and manual interviews, are limited by their reliance on active participation and subjective reporting. Moreover, continuous assessment methods introduced in the post-pandemic era, while aimed at enhancing learning outcomes may inadvertently increase stress by creating a sense of constant monitoring and evaluation. This underscores the urgent need for a validated tool specifically designed to assess stress levels in CPE students.

This study aims to address this gap by developing and validating stress-related assessment tool tailored to the needs of CPE students. The research explores the relationship between stress levels and demographic factors such as sex, civil status, and monthly family income. By identifying these correlations, the study seeks to provide actionable insights for policymakers and educators to mitigate stress among CPE students. Ultimately, this research contributes to the broader discourse on improving mental health support for adult learners in the evolving educational environment.

#### 2. MATERIALS AND METHODS

The Stress-Strain Paradigm was used as the basis for the development of the stress-tool because it considers both objective events (external stressors) and students' perceptions of those experiences (internal stressors). It acknowledges that the environment can exert an independent force on individuals, with consequences that may not always be immediately apparent. Further, the Academic Stress theory was also used in the illustration of academic stress including personal inadequacies, fear of failure, interpersonal difficulties with teachers, teacher-student relationships, and inadequate study facilities.

The questionnaire was self-constructed following the rudiments of quantitative research process. In terms of how it was made, the researcher observed both validity and reliability testing. Further, data triangulation was also used where all the contents/ideas that are found on the specific items of the questionnaire were anchored through interview with the respondents, observation, and literature review. This process further explored ideas to come up with very suitable data that represent stressors among Continuing Professional Education (CPE) students

After a thorough analysis of the contents of the questionnaire, 2 main categories were formulated. These are Internal Stressors and External stressors. The Internal Stressors composed of 10 items namely; currently in a state of tension and nervousness while in school, rushing and hurrying from one activity to another, inability to relax due to a lot of work /assignments, feeling of tension during examination, never getting in top of things, never being well-organized, unclear understanding of priorities and goals in life, poor physical health (frequent illness), diagnosed disability (presence of debilitating conditions) and negative thinking. These represent the antecedents of stress among students. Several empirical studies have shown that these can affect their physical, emotional, and academic performance. Further, Alvarez et al. (2019) emphasized that prolong exposure to stressors may affect the physical, behavioral, and environmental aspects of a person, that is why this condition must be taken seriously as a matter of concern.

For the Eternal stressors, there are 2 sub-categories. The academic that has 7 items namely, low academic grades, hectic class schedules, unapproachable professors/Instructors, unapproachable staff, pressure in beating deadlines of submitting projects and other requirements. On the other hand, the items that represent the stressors among CPE students for the non-academic are family relationship problems, peer pressure, long travelling hours from work to school, delayed remittance of allowances for tuition fees and other monetary needs and extreme hot or cold weather. Furthermore, the researcher consulted with an expert in terms of item validation to prove its veracity in terms of applicability. A pilot study was also conducted using Cronbach alpha with a .90 result indicating that the questionnaire is reliable for distribution.

#### 3. RESULTS AND DISCUSSION

Table 1. shows that the following items in the internal stressors: rushing and hurrying from one activity to another, inability to relax due to a lot of work & assignments, feeling tension during examinations, never being well-organized, unclear understanding of priorities and goals in life and negative thinking affected the respondents in a moderate extent. This implies that the mentioned items are predominant stressors in their day-to-day lives while taking their CPE program. The seriousness and extent of the aftermath of these internal stressors that include physiological and psychological manifestations must not be taken for granted for the student's well-being. Furthermore, Alkhawaldeh et. al. (2023) emphasized that students are prone not only to internal stresses but also to distress and that despite their coping skills, students' experiencing academic related stress must be properly and seriously addressed.

On the other hand, Serrano (2022) articulated those students coping mechanism in the advent of exposure to different stressors during the post pandemic era and the transition context of the academic landscape is evident and a phenomenal occurrence as part of their academic life. Despite the tremendous effects of many stressors in their academic lives, they have remained resilient and adaptive in overcoming stress and distress.

Table 2. shows that the following items in the external stressors: low academic grades, hectic class schedules, unapproachable professors/instructors, poor internet connections, pressure in beating deadlines in submitting papers, family problems, peer pressure, long travelling hours from work to school, monetary problems, and extreme hot and cold weather has affected the respondents into moderate and a slight extent implying that these items have different degree of affect to the respondents.

Reddy et al. (2011) emphasized the need to address academic stress and its sources among students to empower students. Understanding these stressors would be able to facilitate development of stress program and counselling modules that can help students alleviate stress and its manifestations. Though stress and academic stressors are not a new phenomenon, ignoring these may lead to more serious problems for students, especially that the now normal demand is bigger where the landscape of education and its environment is fast-changing. (Pascoe, 2019)

**Table 1.** Internal stressors for CPE Students

Internal Stressors	Mean	Interpretation
Currently in a state of tension or nervousness	2.44	Slight extent
2. Rushing and hurrying from one activity to another	2.62	Moderate extent
3. Inability to relax due to a lot of work & assignments	3.03	Moderate extent
4. Feeling tension during examinations	2.82	Moderate extent
5. Never getting on top of things	2.41	Slight extent
6. Never being well-organized	2.60	Moderate extent
7. Unclear understanding of priorities and goals in life	2.60	Moderate extent
8. Poor physical health (frequent illnesses)	2.48	Slight extent
9. Diagnosed disability (debilitating conditions)	2.21	Slight extent
10. Negativing thinking	2.84	Moderate extent

Likert scale: 1.00-1.74 (not affecting), 1.75-2.49 (slight extent), 2.50-3.24 (moderate extent), 3.25-4.00 (great extent)

Table 2. External stressors for CPE Students

External Stressors	Mean	Interpretation
1. Low academic grades	2.95	Moderate extent
2. Hectic class schedules	3.00	Moderate extent
3. Unapproachable professors/instructors	3.03	Moderate extent
4. Poor internet connections	2.21	Slight extent
5. Pressure in beating deadlines in submitting papers	2.90	Moderate extent
6. Family problems	2.61	Moderate extent
7. Peer pressure	2.41	Slight extent
8. Long travelling hours from work to school	2.47	Slight extent
9. Monetary problems	2.48	Slight extent
10. Extreme hot and cold weather	2.20	Slight extent

Likert scale: 1.00-1.74 (not affecting), 1.75-2.49 (slight extent), 2.50-3.24 (moderate extent), 3.25-4.00 (great extent).

#### 4. CONCLUSION

The researchers have concluded that students of Continuing Professional Education (CPE) experience stress in both internal and external factors during the post pandemic era where the landscape of education is fast changing. Significantly, the creation and validation of stress-related tool is significant in determining the type of stress of CPE students in the creation and implementation of programs that can alleviate stress and empower students.

#### **ACKNOWLEDGMENT**

The researchers would like to acknowledge Wesleyan University- Philippines and the Asi Pacific Consortium of Researchers and Educators (APCORE).

#### REFERENCES

- [1] American Psychological Association. (2023). Enhancing success by managing stress as psychology students. Retrieved from https://www.apa.org/career-development/student-stress-management.pdf
- [2] Bhar, P. (2023). A study on post-pandemic academic stress and mental health amongst adolescent students. IJARIIE, 9(5), 207–212. Retrieved from https://ijariie.com/AdminUploadPdf/A\_STUDY\_ON

\_POST\_PANDEMIC\_ACADEMIC\_STRESS\_A ND\_MENTAL\_HEALTH\_AMONGST\_ADOLESC ENT\_STUDENTS\_ijariie21548.pdf

Frontiers in Psychology. (2022). Academic stress and mental well-being in college students: Correlations, affected groups, and COVID-19. Retrieved from https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.886344/full

- [3] Longdom Publishing SL. (2022). The effects of stress on academic performance among high school students in Lusaka. Journal of Psychology & Psychotherapy. Retrieved from https://www.longdom.org/openaccess/the-effects-of-stress-on-academic-performanceamong-high-school-students-in-lusaka-92060.html
- [4] MDPI. (2024). Variables linked to academic stress related to the psychological well-being of college students during and after the COVID-19 pandemic. Education Sciences, 14(7), Article 739. Retrieved from https://www.mdpi.com/2227-7102/14/7/739
- [5] Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2019). The impact of stress on students in secondary school and higher education. International Journal of Adolescence and Youth, 25(1), 104–112. /EJ1327581.pdf

- https://doi.org/10.1080/02673843.2019.1596823
- [6] PMC. (2022). How stress-related factors affect mental wellbeing of university students: A cross-sectional study to explore the associations between stressors, perceived stress, and mental wellbeing. BMC Psychology. Retrieved from
  - https://pmc.ncbi.nlm.nih.gov/articles/PMC9639818/
- [7] Reddy K. J, Menon K. R, Thattil A. Academic Stress and its Sources Among University Students. Biomed Pharmacol J 2018;11(1).
- [8] Tibus, E. D., & Ledesma, S. K. G. (2021). Factors of academic stress: Do they impact English academic performance? International Journal of Evaluation and Research in Education, 10(4), 1446–1454. Retrieved from https://files.eric.ed.gov/fulltext