

# PERSON-ENVIRONMENT FIT AND THREE FACTOR MODEL OF BURNOUT DURING COVID-19 PANDEMIC AMONG COLLEGE STUDENTS

Jay Errol V. Baral, Maria Leonora A. Bajum-Tombo, Mildred G. Abiva  
Wesleyan University – Philippines  
Cabanatuan City

## Author Note

Correspondence concerning this article should be addressed to Jay Errol V. Baral,  
Wesleyan University – Philippines, Mabini Extension, Cabanatuan City  
Email: jay.villadolid@yahoo.com

## ABSTRACT

This study addressed two research gaps. First, student burnout is a regarded response to long-term academic stress (Asencio-López et al., 2016; Caballero et al., 2010, 2015; Rosales & Rosales, 2013; Villwock et al., 2016), but applied to the current covid-19 pandemic. Second, as conducted studies applied the theory of person-environment fit among employees, workers, and health care groups, this study also proposes using the same among students as their academic routines could also be considered work demands and tasks (Meier and Schmeck, 1985). To explore and apply this theory among students during the Covid-19 pandemic, the researchers investigated how the sudden changes in work routines and activities due to Covid-19 Pandemic contributed to symptoms of burnout. The person-environment fit theory was tested among 50 students by administering Maslach's Burnout Inventory, followed by an interview on items marked with elevated scores. Findings revealed that as a result of congruency in the environment, students experienced moderate to high-level emotional exhaustion, moderate to high-level detachment, and high levels of feelings of inefficacy. In support of qualitative findings from this study, significant statements from their encoded interviews revealed that the interaction between home and online learning environment during the Covid-19 pandemic resulted in incongruency or misfit that added to long-term academic stress and experienced symptoms of burnout.

Keywords: Covid-19, Burnout, Maslach's Burnout Inventory, Person-Environment Fit Theory

## Person-Environment Fit and Three-Factor Model of Burnout during Covid-19 Pandemic among Students.

Person-Environment Fit is a theory that highlights the interaction between an individual and his/her environment [1] [2]. This interplay between the person and environment gives way to congruency or also referred to as a good fit that leads to positive outcomes, or even to incongruency or poor fit of the environment that results in adverse outcomes [3]. Due to the heightened restrictions brought upon the Covid-19 Pandemic, academic institutions shifted from in-person classes to online learning to continue delivering academic instructions, a move that has affected students who were not ready and prepared to meet the demands of online learning. Among workers, and in this population, the students, it is significant to study the congruency or

fit of the environment as it had been seen to extend towards productivity, when the opposite happens, or known as incongruity of the environment or misfit of the workplace, performances lead to burnout. This theory has not been applied among students, although the nature of student activities is also regarded as work tasks the same as employees [4]. This has led the researchers to apply and explore the person-environment fit theory to determine how the sudden change in the learning environment contributed to academic burnout.

Since burnout is studied and seen as a response to chronic and long-term stressful situations [5] [6], the research put this context among students and fulfilled their academic tasks and demands. According to the definition proposed by Maslach, three symptoms constitute burnout. First, the feeling of excessively tired and worn out due to the exposure from the stressful situation. There is also an excessive attitude of being and feeling distant from people. Lastly, a person experiencing burnout also feels low achievement or inefficacy. Recently, this construct and idea were applied and accepted to be applicable as well among students [7] [8], because of long-term academic stress [9]. In connection to the current pandemic situation, relatively few studies had been conducted to investigate academic burnout among students during the Covid-19 pandemic.

The objective of conducting this study aims to address gaps in related researches. First, since student burnout is regarded as a response to long-term academic stress [9], findings from this study propose to give rise to current contribution on possible academic stress during the Covid-19 pandemic. Second, as conducted studies applied the theory of person-environment fit among employees, workers, and health care groups, this study also proposes applying the same among students as their academic routines could also be considered work demands and tasks [10].

## Method

This study utilized a quantitative method to determine the levels of burnout among the participants by using a survey aimed at screening symptoms of burnout among students. This study also implemented a follow-up inquiry through a qualitative method that aimed to examine further the person and environment fit theory connection to their experienced symptoms of burnout.

## Selection of Participants

Participants of this study were randomly selected 50 students enrolled in online classes during the Covid-19 pandemic. All 50 students also agreed and consented to participate in the study.

## Materials and Instruments

**Maslach's Burnout Inventory:** Originally devised by Maslach and Jackson in 1986, the researchers initially used this tool to screen symptoms and levels of burnout among students. The MBI aims to measure levels of perceived emotional exhaustion, cynicism, and feelings of inefficacy. The reliability and validity of the MBI have been tested with a variety of samples [11]. When applied and tested in this study, Cronbach's alpha yielded .84 reliability.

**One-on-one interview:** As pointed out, studies support that academic demands result in symptoms of burnout [12] [13] [14], the researchers drafted an aide-memoire that aims to answer how the changes in person and environment fit led to symptoms of burnout among students during Covid-19 Pandemic. The aide-memoire, as seen in **table 2**. aimed to gather further

qualitative data regarding the changes in their learning environment, how it affected them and their relationships, and the result to their academic performance.

**Data Analysis**

Initial data was encoded and interpreted using SPSS version 20 to determine the burnout level distribution among the participants. Generated findings from this analysis revealed the levels of experienced emotional exhaustion, detachment, and feelings of inefficacy.

For Qualitative Analysis, the researchers utilized Straussian Grounded theory analysis to systematically code and use the emerging data to match and fit the relevant literature used in the study [15].

**Results**

For this study, 50 randomly selected college students enrolled in online classes participated. Among the participants, the youngest 19 years old, while the oldest is 23 years old. In terms of gender, the majority of the participants are female. Initial screening of levels of burnout using Maslach’s Burnout Inventory showed elevated scores on all three dimensions. As stated from previous studies, College students are also susceptible to burnout [16] [17]. This was supported from the initial findings that the participants experienced moderate to high-level emotional exhaustion, moderate to high-level detachment, and high levels of feelings of inefficacy.

**Table 1.**

	Low-Level	Moderate	High-level	Total
Emotional Exhaustion	10	16	24	50
Detachment	1	27	22	50
Feelings of Inefficacy	0	0	50	50

This initial finding gives important consideration to burnout syndrome among students because it has been linked with negative well-being and poor academic performance [18], which the researchers qualitatively investigated using an aide-memoire (**table2**).

**Table 2. aide-memoire**

	Central Question
1. Emotional Exhaustion	How did the change in the learning environment affect you?
2. Detachment	What were the changes in your interpersonal relationships?
3. Feelings of Inefficacy	What was the result of the new environment on your academic performance?

As this study takes on the definition of burnout as a response to chronic interpersonal situations and stressors among students, Significant statements from encoded interviews showed

that as a response to stressful situations such as hectic daily schedules, adjustments to sudden changes in their academic routines, and complying with overwhelming requirements, they emotionally exhausted. More so, the sudden change in the online learning environment during the Covid-19 pandemic resulted in difficulty balancing academic demands while doing household tasks, dealing with an unstable internet connection, and overwhelming academic requirements.

"Everything feels so exhausting that I became lazy and unmotivated." -student1

"Everything feels overwhelming." -student4

"There are so many changes like I do not want to study." -student5

"We have too many requirements and activities submit that most of my time gets spent merely on online classes." -student6

"The new learning environment at our home while attending online classes has been so exhausting. " – student7

"Learning from our home was very difficult. There were just too many distractions." -student8

"We have a very hectic schedule, and it keeps me worrying about school responsibilities while also doing household." – student 9

"I have to listen to our online classes while I was to do household chores." -student 11

"It was tough because I take care of my younger sister while studying." – student 12

"Studying from home during pandemic is exhausting that find myself becoming lazy and unproductive." – student 14

"I have been emotionally exhausted, which leads me to procrastination and frustrations." – student 15

"Learning has become exhausting." -student 16

"I get easily frustrated and overwhelmed." – student 19

"The schedule and workload can be so cruel. And it is even harder to think and absorb the information during online classes." -student24

"I missed a few classes because of poor internet connectivity within our area, so I had to read and catch up on posted modules while I was still thinking of other subjects I missed." – student 26

"Learning has become very exhausting." – student 28

“Too many tasks to do online and at home that I do not know what to do anymore.” – student 31

The change in their learning environment also led to feelings of detachment among their classmates and peers that added to feelings of difficulty in dealing with the new online learning situation. As seen on their encoded significant statements, they have to do their responsibilities at home while attending their scheduled online classes. They also felt disconnected from peers and classmates because of accomplishing overwhelming tasks at home and from complying with academic requirements at the same time.

“Even if I am online, I still attend to the needs of my family. I am online, but my family asks me to do something else.” – student 3

“I lock myself in my room so I can focus on my classes.” – student 5

"I do not get to talk much to people in our house anymore." – student 6

"I just wanted to rest after each class, and I do not want to talk to anyone in our house or my friends." – student 9

"Too much academic requirements, I feel like I no longer have time for myself or anything else." -student11

"I do not get to catch up with my friends anymore." – student 13

"Much more responsibilities resulted as I have to do my responsibility as a daughter and at the same time as a student." -student 27

“Learning from home brought more responsibilities that I no longer have time for other things.” - student29

“Since I cannot personally be with my classmates, learning becomes more difficult.” -student31

"Before the pandemic, I always look forward to going home, but now that I have to do studying in the house, sometimes I felt like I lost the place where I can just go and rest." – student 34

“Since I am always at home, I had become absent-minded. Thus, my forgetting some of my requirements.” -student37

"Since I am at home for our classes, my parents ask me to do the chores frequently." - student 46

“I cannot focus on my class because of family matters.” - student48

“It is hard for me to reach out to my classmates. I do not get enough help because they are all busy with our academic requirements”. -student 49

Other than the two previous symptoms of academic burnout, encoded significant statements, presents that the change in the academic environment among students also negatively affects their academic performance. Students answered that as compared to when classes were done in-person, online learning during the Covid-19 pandemic is exhausting due to reasons such as difficulty in coping, retaining focus, managing time for learning that brought about poor performance, which was also supported by high-level feelings of inefficacy on Maslach’s Burnout Inventory.

“The experience of online learning during pandemic has made me lazy to study.” -student 1

"It was tough to retain and obtain excellent grades." -student 3

"I do not think I performed well in my academics because of online learning." -student 5

"There are too many distractions on online classes, I do not think I performed well." – student 7

“I still prefer my academic performance during in-person or face to face classes.” -student 9

“As compared to in-person classes, doing online requirements became very difficult to do.” -student 10

“It feels like I am not learning at all.” -student 13

"It was difficult to learn and remember what has been discussed." -student 14

"To study at home during a pandemic is very difficult. Other than school matters, I still have family matters to think of." – student 16

“Online classes are mentally draining.” – student 18

"Up until now I am having a hard time coping in this situation and my study habits changed a lot that I do not perform well." – student 20

"I attend my online classes, but I easily forget the discussed topic." -student 22

“Compared to when things were normal, I feel like I need to be more responsible as a student and put double effort in general because current situations are harder than before.” -student 32

"It is tough to comply with too many online requirements." – student 38

“I am having difficulty focusing and concentrating on my academics.” – student 47

## Discussion

Student burnout happens as a response to long-term academic stress [19] [20] [21] [22]. According to Barraza [23], students' academic stress and burnout results from cognitive tiredness that stems from overwhelming academic demands. This has led other researches about burnout to extend beyond students [24] [25] [26]. Students may differ from workers, but their daily structured activities, including scheduled classes, submission of requirements, and activities, can also be regarded as work tasks, same with employees [27]. When burnout was further studied among the student population by Pines et al. [28], it was seen from their studies that student burnout level ranked from middle to high-level. It was then proposed that academic burnout among students due to social and psychological factors also results in emotional exhaustion, depersonalization, and feeling of inefficacy [29] [30] and even reduced academic performance [31] [32] [33].

Findings from this study showed addressed academic burnout during the Covid-19 pandemic by administering Maslach's Burnout inventory among 50 students. In support of conducted research on burnout among students, this study showed that the participants experienced moderate to high-level emotional exhaustion, moderate to high-level detachment, and high levels of feelings of inefficacy. To further investigate and gather additional data towards the experienced symptoms of burnout, the researchers qualitatively applied the person and environment fit theory by conducting interviews based on items with elevated scores. Significant statements revealed that the sudden shift in online learning due to Covid-19 precautions and restrictions was deemed as a misfit or incongruency of the environment. According to Cable & Edwards [34], people's reactions and behaviors depend on the congruency of the environment to the situation. When applied among students, this was supported by their significant statements from encoded interviews that due to the Covid-19 pandemic, they experienced emotional exhaustion from attending online classes. At the same time, they perform household tasks, deal with unstable internet connections and comply with overwhelming academic tasks. Another factor of burnout, detachment or distant attitudes towards people was emotional exhaustion between performing overwhelming academic demands and household tasks. Lastly, feelings of inefficacy are reported with highlighted statements that students prefer in-person classes as they are not satisfied with their academic performances due to difficulty in coping, retaining focus, and learning in the new environment.

In conclusion, findings from this study generated new knowledge by applying the person-environment fit theory among students, expanding the concept of this theory among students showed student academic environment as a combination of both at school and within the family. During the current covid-19 pandemic, the interaction between these two environments resulted in incongruency or misfit of learning from home environment that resulted in their experienced elevated symptoms of academic burnout during the current Covid-19 pandemic such as moderate to high-level emotional exhaustion, moderate to high-level detachment, and high levels of feelings of inefficacy.

Declaration of conflicting interests

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