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# **Stress Experiences and Coping Strategies Among Employed Teachers of Ifugao State University During the COVID-19 Pandemic**

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| Abstract   |
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| The COVID-19 pandemic changed the teaching-learning            |
| modality around the world. These sudden changes, along         |
| with the health threats and uncertainty of COVID-19, made      |
| teachers feel stressed, including those in higher education    |
| institutions. Hence, a descriptive survey was conducted to     |
| assess the stress experiences and coping strategies of_        |
| employed university teachers of Ifugao State University        |
| (IFSU), Ifugao, Philippines. It was found that most (82.54%)   |
| of the participating university teachers experienced moderate  |
| perceived stress. Moreover, as the reported frequency of       |
| experience with various stressors increased, so did their      |
| reported feelings of stress. Among the contributing stressors, |
| health-related stressors were often experienced, finance-      |
| related and work-related stressors were sometimes              |
| experienced, while personal and well-being-related stressors   |
| were rarely experienced. It was also found that female         |
| university teachers were more vulnerable to health-related     |
| stressors than male university teachers. At the same time,     |
| single university teachers were more vulnerable to personal    |
| and well-being-related stressors than married university       |

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teachers. As the reported feelings of stress increased, so did the frequency of use of coping strategies. Approach-style coping strategies were used more than avoidance-style coping strategies. In addition, religious coping was often used, while humor coping was rarely used. IFSU could devise several ways to alleviate the stress of university teachers. These could help university teachers cope positively to retain high-quality teaching and promote a culture of resilience, problem-solving, and well-being.

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#### Introduction

The COVID-19 pandemic has affected the education sector, including higher education. Due to the rapid increase in morbidity and mortality rates worldwide, several countries, including the Philippines, enforced quarantines, lockdowns, and other health protocols to slow the spread of the virus. This resulted in the suspension of the traditional face-to-face classes and their replacement with online classes to allow the continuation of the teaching-learning process within the safety of the participant's homes. In response, the university teachers were prompted to convert and redesign their instructional materials for use in an online environment and to master the various online learning tools in time for class reopening. However, the shift to online classes was faced with several challenges. A recent study identified issues related to motivating students, using Information and Communication Technology (ICT), managing time, and effectively evaluating students'



acquired knowledge as the most salient challenges encountered by Filipino teachers during the pandemic (Bautista et al., 2021). These challenges, along with personal problems and frustrations with the institution's lack of support during the pandemic, were reported to have compromised teachers' mental health (Robinson et al., 2023).

Stress is a state of worry or mental tension developed as a response to a difficult situation like the COVID-19 pandemic (World Health Organization, 2022). It can alter how a person feels and behaves. It can even lead to the development of illnesses that may impair both mental and physical health. Teacher stress, in particular, strongly correlates with burnout (Wong et al., 2017). The more stressed the teachers are, the more emotionally exhausted and depersonalized they become. The high stress levels can negatively affect the teachers' teaching quality and productivity and the students' engagement and school satisfaction (Ramberg et al., 2019; Herman et al., 2020).

Several studies have shown various accounts of the effects of stress on teachers during the COVID-19 pandemic. A study conducted among Argentinian teachers showed that teachers who perceived high pressure and had fewer resources were at a higher risk of work stress. The predominant stressors identified by the study were not inherent to the teaching role. Still, they were related to the epidemiological situation, fear of contagion, uncertainty, and the use of new technologies (Vargas-Rubilar & Oros, 2021). A study among Chilean teachers reported that participants who suffered from severe or very severe stress symptoms related to the COVID-19 pandemic were particularly concerned about aspects related to work, mental health, and the health situation. It was also observed that the participants generally presented low levels of resilience, which suggests that they may have been more vulnerable to the adverse effects of stress



(Lacomba-Trejo et al., 2022). A study among Filipino university teachers reported that university teachers who perceive themselves as having poorer health status and those at higher risk of getting COVID-19 may experience greater stress brought on by the pandemic (Oducado et al., 2020).

Coping strategies can moderate an individual's feelings of stress (Tracy et al., 2022). The various coping strategies can be categorized as follows (Eisenberg et al., 2012): (1) Approach-style coping strategies that allow an individual to actively deal with and alleviate the source of stress (e.g., problem-solving or seeking information); (2) Avoidancestyle coping strategies which make an individual disengage and turn away from the source of stress (e.g., denial or withdrawal); (3) Religious coping and (4) humor coping, which may consist of both adaptive and maladaptive components that cannot be wholly segregated into either of the first two categories of coping strategies mentioned above. Depending on the type of coping strategies used, it can affect how an individual responds to stressful situations. Using approach-style coping strategies can help alleviate feelings of stress, thus resulting in improved long-term mental and physical health outcomes (Rehr & Nguyen, 2021). On the other hand, the use of avoidance-style coping strategies can intensify feelings of stress, thus resulting in adverse health outcomes (Warchol-Biedermann et al., 2021).

Studies have found that teachers with poor coping abilities tend to experience significantly high stress levels (Rajesh et al., 2022). According to Herman et al. (2020), high stress levels can negatively affect the teacher's classroom management, affecting student behavior. Disruptive student behavior can further contribute to the teacher's stress. Continuous stress exposure by teachers can lead to burnout and

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student underachievement. Hence, effective coping strategies can help improve the teachers' response to stressful situations, overall wellbeing, and attaining students' educational outcomes.

The Ifugao State University (IFSU), both a higher educational institution and a workplace, needs to adapt and incorporate such factors to improve the well-being of university teachers as they are the key figures in educating and guiding students to reach their career goals. Hence, this study focused on assessing the general stress experiences of university teachers and what coping strategies were used during the COVID-19 pandemic. The study's results can be used as a basis for policy-making and the development of strategies that can be used to improve the well-being of university teachers, even after the pandemic.

#### **Objectives**

The study's general objective was to assess the stress experiences and coping strategies used by university teachers of IFSU during the COVID-19 pandemic.

The specific objectives of the study were to determine the:

- 1. Perceived stress
- 2. Frequency of experience with stressors
- 3. Sociodemographic variation in the frequency of experience with stressors
- 4. Frequency of use of coping strategies
- 5. Sociodemographic variation in the frequency of use of coping strategies, and



6. Variation in the frequency of experience with stressors and frequency of use of coping strategies with perceived stress.

#### Methods

#### Research Method

The study's objectives were addressed by conducting a descriptive survey research design. The study utilized printed survey questionnaires to gather information from the university teachers of IFSU.

# **Selection of Participants**

The target population included all the 332 university teachers of IFSU employed from October to December 2021. Since the population was relatively small, complete enumeration was used in gathering the data. Before the data gathering, informed consent was obtained from the university teachers through a signed informed consent form. Of the 332 university teachers, only 189 responded (56.9%). The sociodemographic characteristics of the respondents are shown in Table 1.

**Table 1.** *The sociodemographic profile of the respondents.* 

| Characteristics | n   | Percent (%) |
|-----------------|-----|-------------|
| Overall         | 189 | 100         |
| Sex             |     |             |
| Male            | 76  | 40.2        |
| Female          | 113 | 59.8        |
| Age Group       |     |             |
| 20 to 29        | 79  | 41.8        |
| 30 to 39        | 54  | 28.6        |
| 40 to 49        | 38  | 20.1        |
| 50 to 60        | 18  | 9.5         |



| Marital Status    |     |      |
|-------------------|-----|------|
| Single            | 91  | 48.1 |
| Married           | 98  | 51.9 |
| Employment Status |     |      |
| Permanent         | 90  | 47.6 |
| Contractual       | 99  | 52.4 |
| Monthly Salary    |     |      |
| 20k to 29k        | 139 | 73.5 |
| 30k to 49k        | 34  | 18.0 |
| 50k and above     | 16  | 8.5  |

### **Instruments for Data Gathering**

Three questionnaires, adopted from several studies (detailed below), were used to measure the perceived stress, frequency of experience with stressors, and frequency of use of coping strategies. Since these adopted questionnaires were originally used in foreign settings, they were subjected to content validity to ensure their applicability in the context of the Philippines and IFSU. The content validity was assessed by a panel of social science and psychology experts, all employed at IFSU and not part of the research team. Pilot testing was also conducted to ascertain the questionnaires' internal consistency (via Cronbach Alpha).

- 1. The Pandemic-Related Perceived Stress Questionnaire or PRPSQ (Cronbach a = 0.81) from the study of Campo-Arias et al. (2020) was used to measure perceived stress. It consisted of 10 Likert items, rated using the score: 0 never, 1 rarely, 2 sometimes, 3 often, and 4 always. The sum of the Likert items was used to determine the level of perceived stress as mild (0 13), moderate (14 26), or severe (27 40) (Graves et al., 2021).
- 2. The Stress Index Questionnaire or SIQ (Cronbach a = 0.70) from the study of MacIntyre et al. (2020) was used to measure the frequency of experience with stressors. It consisted of 15 Likert



items corresponding to 15 stressors rated using the score: 1 - never, 2 - rarely, 3 - sometimes, 4 - often, and 5 - always. For this study, the listed stressors were grouped into four categories: health-related (3), work-related (5), finance-related (2), and personal and well-being-related stressors (5). An openended question about the other stressors experienced during the pandemic was also included.

3. The BriefCOPE Questionnaire (Cronbach a = 0.92) from the study of Carver (1997) was used to measure the frequency of use of coping strategies. It consisted of 28 Likert items rated using the score: 1 - never, 2 - rarely, 3 - sometimes, 4 - often, and 5 - always. The coping strategies were categorized as follows: (1) Approach-style coping strategies, including active coping, use of emotional support, use of instrumental support, positive reframing, planning, and acceptance; (2) Avoidance-style coping strategies, including self-distraction, denial, substance use, behavioral disengagement, venting, and self-blame; (3) Religious coping; and (4) Humor coping.

#### **Data Gathering Procedure**

The data was gathered for about a month, from November to December 2021. The printed questionnaires were personally distributed to the university teachers, who were given a week to complete. The completed questionnaires were then retrieved personally from the respondents. The results were immediately transcribed into a password-protected spreadsheet file. Immediately after, the transcribed questionnaires were shredded and sent to the recycling.



#### **Statistical Tools**

Frequency was used to segregate the computed perceived stress scores into mild, moderate, or severe. Mean was used in computing the average scores for the PRPSQ, SIQ, and BriefCOPE. The mean score for the SIQ and BriefCOPE was interpreted using the scale in Table 2. ANOVA was used in comparing the mean scores for the following: (1) sociodemographic variation in the frequency of experience with stressors, (2) sociodemographic variation in the frequency of use of coping strategies, (3) variation in the frequency of experience with stressors with perceived stress, and (4) variation in the frequency of use of coping strategies with perceived stress. Post-hoc analyses for significantly different results were done using Tukey's Honestly Significant Difference (HSD) Test. All inferential statistical tests were done at  $\alpha$  = .05.

**Table 2.** *Frequency scale used in interpreting the mean rating score.* 

| Rating | Mean Score Range | Interpretation |
|--------|------------------|----------------|
| 1      | 1.00 - 1.80      | never          |
| 2      | 1.81 - 2.60      | rarely         |
| 3      | 2.61 - 3.40      | sometimes      |
| 4      | 3.41 - 4.20      | often          |
| 5      | 4.21 - 5.00      | always         |

### **Internal Review**

The research proposal for this study had undergone an agency inhouse review (AIHR) organized by the Ifugao State University in December 2020. In the AIHR, the research proposal was reviewed by several experts in the field of social science research. The review



included an evaluation of the ethical and regulatory compliance to ensure that the study complies with ethical standards and relevant regulations.

#### **Results and Discussion**

#### **Perceived Stress**

**Table 3.** *The perceived stress of IFSU university teachers during the COVID-19 pandemic.* 

| Characteristics          | n   | Mild Stress (%) | Moderate Stress (%) | Severe Stress (%) |
|--------------------------|-----|-----------------|---------------------|-------------------|
| Overall                  | 198 | 3.17            | 82.54               | 14.29             |
| Sex                      |     |                 |                     |                   |
| Male                     | 76  | 1.32            | 82.89               | 15.79             |
| Female                   | 113 | 4.42            | 82.30               | 13.27             |
| Age Group                |     |                 |                     |                   |
| 20 to 29                 | 79  | 3.80            | 79.75               | 16.46             |
| 30 to 39                 | 54  | 1.85            | 88.89               | 9.26              |
| 40 to 49                 | 38  | 2.63            | 81.58               | 15.79             |
| 50 to 60                 | 18  | 5.56            | 77.78               | 16.67             |
| Marital Status           |     |                 |                     |                   |
| Single                   | 91  | 2.20            | 80.22               | 17.58             |
| Married                  | 98  | 4.08            | 84.69               | 11.22             |
| <b>Employment Status</b> |     |                 |                     |                   |
| Permanent                | 90  | 4.44            | 80.00               | 15.56             |
| Contractual              | 99  | 2.02            | 84.85               | 13.13             |
| Monthly Salary           |     |                 |                     |                   |
| 20k to 29k               | 139 | 3.60            | 82.01               | 14.39             |
| 30k to 49k               | 34  | 2.94            | 79.41               | 17.65             |
| 50k and above            | 16  | 0.00            | 93.75               | 6.25              |

It is shown in Table 3 that most university teachers experienced moderate perceived stress (82.54%). A small fraction experienced severe perceived stress (14.29%), while an even smaller fraction experienced mild perceived stress (3.17%). When grouped according to the various sociodemographic characteristics, it was also found that



most university teachers experienced moderate perceived stress regardless of their sex, age group, marital status, employment status, or monthly salary. This trend was also consistent with the results obtained by Oducado et al. (2021) among their target university teachers in the Philippines during the pandemic, where most of their respondents experienced moderate perceived stress. A recent study by Oshri et al. (2022) has shown that experiencing mild to moderate perceived stress may have potential benefits, such as developing efficient and effective coping behavior and reduced risk of developing mental health disorders. In contrast, experiencing severe perceived stress can be damaging to an individual. Following these findings, most university teachers in IFSU may have improved resiliency against future stressful situations. However, further investigation must be done to confirm this, as various individuals have different abilities to tolerate stress, and there is a very thin line between the right amount of stress and too much stress (Oshri et al., 2022).

#### Frequency of Experience with Stressors

It is shown in Table 4 that eight out of the 15 listed stressors during the COVID-19 pandemic were rated above the midpoint (3 out of 5). In addition, the health-related stressors (M = 3.73) were often experienced by the university teachers. Finance-related stressors (M = 3.14) and work-related stressors (M = 2.86) were sometimes experienced. In contrast, personal and well-being-related stressors (M = 2.51) were rarely experienced.

Among the health-related stressors, university teachers were always stressed concerning their family's health (M = 4.54) and their own (M = 4.26). Similar results were shown in the studies of Gadermann et al. (2021) and Frenkel et al. (2022), where the top stressors were also health-related: the fear of vulnerable family members getting severely



**Table 4.**The frequency of experience with stressors of IFSU university teachers during the COVID-19 pandemic.

|     | List of Stressors  | Mean | Frequency of Experience |
|-----|--|------|-------------------------|
| Не  | alth-related Stressors                                     |      |                         |
| 1.  | 1. I am concerned with the health of my family.            |      | always                  |
| 2.  | I am concerned with my own health.                         | 4.26 | always                  |
| 3.  | I experience stress in my responsibility as a caregiver to | 2.39 | rarely                  |
|     | my parents and/or children.                                |      |                         |
|     | Grand Mean   | 3.73 | often                   |
| Fin | ance-related Stressors                                     |      |                         |
| 1.  | I have problems with my finances.                          | 3.26 | sometimes               |
| 2.  | I experience shortages in my daily necessities.            | 3.01 | sometimes               |
|     | Grand Mean   | 3.14 | sometimes               |
| Wa  | ork-related Stressors                                      |      |                         |
| 1.  | I have a heavy workload.                                   | 3.23 | sometimes               |
| 2.  | I experience long or irregular hours of work.              | 3.06 | sometimes               |
| 3.  | I feel stressed with teaching online.                      | 3.07 | sometimes               |
| 4.  | I lose control of my work.                                 | 2.52 | rarely                  |
| 5.  | I have no life and work balance.                           | 2.43 | rarely                  |
|     | Grand Mean   | 2.86 | sometimes               |
| Per | rsonal and Well-being-related Stressors                    |      |                         |
| 1.  | I cannot travel freely to places I want to go.             | 3.44 | often                   |
| 2.  | I do not have recreational activities.                     | 2.58 | rarely                  |
| 3.  | I lose control of my own decisions.                        | 2.29 | rarely                  |
| 4.  | I feel isolated and lonely.                                | 2.15 | rarely                  |
| 5.  | I have problems with my relationships with other people.   | 2.10 | rarely                  |
|     | Grand Mean   | 2.51 | rarely                  |

sick and dying and the fear of getting infected and infecting others. These fears and concerns were expected as COVID-19 already claimed millions of lives since its onset (World Health Organization, 2022). These may also be attributed to their fear of getting quarantined in the hospitals and converted facilities, which are in poor condition and were already at full capacity (Morales & Lema, 2021) during data



gathering. Moreover, going to the hospital for treatment of non-COVID-19 diseases was rather difficult because of the lack of public transportation, declining funds (Uy et al., 2021), long queues for admission, and additional documents needed (such as a negative COVID-19 test) to enter the hospital's premises.

The open-ended question that listed 'other' stressors experienced produced the following answers, which supported the university teachers' experiences on these health-related stressors: (1) people not following prescribed COVID-19 protocols and (2) emergence of new COVID-19 variants. Amidst the reported increasing mortality rate due to the COVID-19 virus, some people in the country have violated stay-at-home orders, were not wearing face masks, and were not practicing social distancing (Hapal, 2021). Such violation of pandemic protocols was feared to have caused the rapid increase in morbidity and successive lockdowns. Upon the arrival of the COVID-19 vaccines, several misconceptions circulated in social media, which resulted in hesitancy and refusal of people to get vaccinated (Amit et al., 2022; Watzl, 2022). Moreover, new COVID-19 variants also deemed some vaccines less effective in providing immunity (Singh et al., 2022).

The financial-related stressors - problems with finances (M = 3.27) and shortage in daily necessities (M = 3.01) - were also highly rated. Financial difficulties may result in low quality of life and may lead to severe stress and other mental health problems, such as depression and anxiety (Aruta, 2021). These can be attributed to the continuous price increase of daily necessities (mostly food) since the onset of the COVID-19 pandemic (Asian Development Bank, 2021). The continuous price increase has worsened the management of finances to pay the rent, mortgage, food, and health insurance, among others (Swigonski et al., 2021). This was supported by the report of the World



Bank (2020) that about 40% of the households in the country have reduced capacity to buy food essentials.

The open-ended question, which listed 'other' stressors experienced, produced the following answers that further supported the university teachers' experiences on these financial-related stressors: (1) late salary disbursement and (2) increasing expenses on internet data usage. Late salary disbursement was a persistent problem among contractual university teachers even before the pandemic. Thus, the pandemic may have aggravated the financial problems, primarily if university teachers only relied on their salaries for their finances. The pandemic also caused the shift to online classes, which were highly dependent on reliable and stable internet connections. While IFSU has an internet connection, it was not reliable and stable enough, especially when many connected and conducted online classes simultaneously. Hence, the university teachers used their money to buy internet data plans, further depleting their available financial resources.

The following work-related stressors were also highly rated: heavy workload (M = 3.24), long or irregular hours of work (M = 3.06), and teaching online (M = 3.05). Similar stressors were also prevalent in several studies (Aperribai et al., 2020; Kuwato & Hirano, 2020; Minihan, Begley et al., 2022). In general, the workload of teachers has significantly increased because of the COVID-19 pandemic (Jain et al., 2021; Minihan, Adamis et al., 2022). Due to the suspension of face-to-face classes, university teachers had to recalibrate their instructional materials and change their teaching style to fit the online classes' demands. This was further aggravated by the time pressure for the immediate implementation in time for the class reopening. Moreover, the amount of paperwork to be submitted has increased (Minihan, Begley et al., 2022). In IFSU, several report documents - daily time



record, monthly performance output report, individual plan report, individual accomplishment report, request for work-from-home schedule, mode of verification for activities report, and a copy of contract (for the contractual university teachers) - were required to be submitted simultaneously at the end of the month as requirements for salary disbursement. Additional documents were also created to cater to the compliance of students with their in-progression (IP) status of grades, which further increased the work of university teachers as they had to recheck and recalculate the grades. In conjunction with the heavy workload was increased working hours (Gicheva, 2021; Lizana & Vega-Fernandez, 2021). To meet set deadlines in their workload, university teachers had to extend beyond their work hours per day and per week. In addition, the prevalence of out-of-hour communications from supervisors, colleagues, and students made it hard for university teachers to get disconnected outside of work hours (Minihan, Begley et al., 2022).

Of the personal and well-being-related stressors, only one was highly rated: being unable to travel freely to places they want to go (M = 3.44). This was supported by the study of Mayo et al. (2021), which reported changes in the traveling pattern - due to the restrictions, people only went out to buy essentials, while traveling to work had decreased due to the formation of the "work from home" arrangements that allowed them to finish their task within the comforts and safety of their homes. Furthermore, because of the continued rise in the number of new COVID-19 cases and variants amidst the nationwide administration of COVID-19 vaccination, public and private transportation restrictions were prevalent at the time of data generation (Philippines Department of Health, 2022).



In the study of MacIntyre et al. (2020), having no recreational activities, no life and work balance, losing control of their own decisions, and losing control of work were among the top stressors experienced by their target population. However, in this study, university teachers rarely experienced these stressors. This may be due to the differences in the time frame during the conduct of the study: the study of MacIntyre et al. (2020) was conducted during the onset of the pandemic when a lot of changes and adjustments were still being made, while this study was conducted when protocols were already established. Hence, the university teachers would have already adapted to the current life and work set-up. Sociocultural differences may have also influenced the results since social and cultural support interactions are among the factors that can shape one's experience of stress (Pourmand et al., 2021). Since the study of MacIntyre et al. (2020) did not include participants from Southeast Asia, it may not have captured how university teachers in this region experienced stress during the pandemic. A recent study by Litam and Chan (2022) listed several culturally specific traits of Filipinos, including self-reliance, patience, endurance, flexibility, inner strength, resilience, hardiness. Hence, these culturally specific traits could be why university teachers were less likely to be stressed from having no recreational activities, no life and work balance, and losing control of their own decisions and work. However, further investigation must be done to verify how these culturally specific traits play a role in the stress experiences of university teachers of IFSU.

# Sociodemographic Variation in the Frequency of Experience with Stressors

It is shown in Table 5 that the frequency of experience with healthrelated stressors between male and female university teachers



significantly differed (p<.05). The female university teachers were found to have experienced health-related stressors more frequently than the male university teachers. This result agrees with the studies of Kirmizi et al. (2021) and Saeedi et al. (2022), which showed that women have higher health anxiety than men during the COVID-19 pandemic. This may be due to the effect of the behavioral anxiety-inducing sex hormone (extrahypothalamic corticotropin-releasing hormones), and women generally perform more tasks and responsibilities in life than men (Saeedi et al., 2022).

**Table 5.**The sociodemographic variation in the frequency of experience with stressors of IFSU university teachers during the COVID-19 pandemic.

| O1 ( ' ' '               |                    | Stressors      |                |                |
|--------------------------|--------------------|----------------|----------------|----------------|
| Characteristics —        | Health             | Finance        | Work           | Personal       |
| Overall                  | 3.73               | 3.14           | 2.85           | 2.51           |
| Sex                      |                    |                |                |                |
| Male                     | 3.57               | 3.01           | 2.79           | 2.45           |
| Female                   | 3.84               | 3.23           | 2.91           | 2.55           |
| Fvalue                   | 7.047              | 2.818          | 1.258          | 1.050          |
| P-value                  | .009*              | $.095^{ m NS}$ | .263NS         | $.307^{ m NS}$ |
| Age Group                |                    |                |                |                |
| 20 to 29                 | 3.72               | 3.20           | 2.79           | 2.65           |
| 30 to 39                 | 3.73               | 2.99           | 2.97           | 2.34           |
| 40 to 49                 | 3.88               | 3.29           | 2.92           | 2.50           |
| 50 to 60                 | 3.44               | 2.97           | 2.74           | 2.43           |
| Fvalue                   | 1.536              | 1.227          | 0.912          | 2.290          |
| P-value                  | $.207^{ m NS}$     | $.301^{NS}$    | $.436^{ m NS}$ | $.080^{ m NS}$ |
| Marital Status           |                    |                |                |                |
| Single                   | 3.75               | 3.26           | 2.82           | 2.63           |
| Married                  | 3.71               | 3.03           | 2.90           | 2.40           |
| Fvalue                   | 0.150              | 3.310          | 0.642          | 5.192          |
| P-value                  | .699 <sup>NS</sup> | $.070^{ m NS}$ | $.424^{ m NS}$ | .024*          |
| <b>Employment Status</b> |                    |                |                | _              |
| Permanent                | 3.73               | 3.03           | 2.90           | 2.48           |
| Contractual              | 3.73               | 3.24           | 2.82           | 2.54           |



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| Fvalue         | 0.034              | 2.674          | 0.547          | 0.281              |
|----------------|--------------------|----------------|----------------|--------------------|
| P-value        | .953 <sup>NS</sup> | $.104^{ m NS}$ | $.461^{ m NS}$ | .597 <sup>NS</sup> |
| Monthly Salary |                    |                |                | _                  |
| 20k to 29k     | 3.72               | 3.16           | 2.83           | 2.52               |
| 30k to 49k     | 3.92               | 3.00           | 3.06           | 2.54               |
| 50k and above  | 3.45               | 3.22           | 2.70           | 2.40               |
| Fvalue         | 2.671              | 0.529          | 1.889          | 0.249              |
| P-value        | $.072^{NS}$        | $.590^{ m NS}$ | $.154^{ m NS}$ | $.780^{ m NS}$     |

*Note.* Means not sharing subscripts differ significantly at a = .05, as indicated by Tukey's HSD Test.

It was also found that the frequency of experience with personal and well-being-related stressors between single and married university teachers was significantly different (p<.05). Particularly, the single university teachers experienced personal and well-being-related stressors more frequently than married university teachers. This result agrees with the studies of Peng et al. (2022) and Kowal et al. (2022), which showed that single individuals experienced lower well-being and higher stress than married individuals. A recent study by Girme et al. (2022) showed that social support and social discrimination mediate the relationship between marital status and well-being. Married individuals tend to have higher social support compared to single individuals. This can be attributed to the additional social support married individuals receive from their spouses. Single individuals tend to be discriminated against compared to married individuals in various aspects, including but not limited to social treatment, health benefits, salary, and taxes (DePaulo & Morris, 2006). The study of Girmet et al. (2022) further showed that single individuals also tend to get discriminated against by people they turn to for comfort (e.g., married friends and parents).

<sup>\*</sup> p < .05; NS = not significant



## Frequency of Use of Coping Strategies

As shown in **Table 6**, most of the coping strategies often used by university teachers belonged to the approach-style coping strategies (M = 3.57). Meanwhile, those under the avoidance-style coping strategies (M = 2.30) were rarely used. These results were consistent with several studies (Goldman, 2021; Nazari et al., 2022), showing that approach-style coping strategies were used more often than avoidance-style coping strategies. Hence, the use of approach-style coping strategies enabled university teachers to adapt to the COVID-19 pandemic by facing and accepting the reality, getting used to the situation, attempting to improve the situation, and getting support from others rather than developing negative emotions like withdrawal, denial, despair, or disengagement (Carver, 1997).

**Table 6.**The frequency of use of coping strategies by IFSU university teachers during the COVID-19 pandemic.

|    | Coping Strategies           |                   | Mean | Frequency of Use |
|----|-----------------------------|-------------------|------|------------------|
| Ap | proach-style Coping         |                   |      |                  |
| 1. | Acceptance                  |                   | 4.05 | often            |
| 2. | Positive Reframing          |                   | 3.78 | often            |
| 3. | Active Coping               |                   | 3.76 | often            |
| 4. | Planning                    |                   | 3.60 | often            |
| 5. | Use of Emotional Support    |                   | 3.22 | sometimes        |
| 6. | Use of Instrumental Support |                   | 3.17 | sometimes        |
|    |                             | <b>Grand Mean</b> | 3.59 | often            |
| Av | oidance-style Coping        |                   |      |                  |
| 1. | Self-distraction            |                   | 3.30 | sometimes        |
| 2. | Venting                     |                   | 2.76 | sometimes        |
| 3. | Denial                      |                   | 2.26 | rarely           |
| 4. | Behavioral Disengagement    |                   | 2.02 | rarely           |
| 5. | Self-Blame                  |                   | 2.03 | rarely           |



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| 6. Substance Abuse |                   | 1.49 | never  |
|--------------------|-------------------|------|--------|
|                    | <b>Grand Mean</b> | 2.31 | rarely |
| Religion           |                   | 3.93 | often  |
| Humor              |                   | 2.47 | rarely |

Among the avoidance-style coping strategies, it was found that university teachers sometimes used self-distraction and venting. In contrast, the rest of the avoidance-style coping strategies were rarely used. These results were consistent with several studies which also showed that self-distraction (Hock et al., 2021; Munsell et al., 2020) and venting (Dumciene & Pozeriene, 2022; Gurvich et al., 2021; Salazar et al., 2021) were the commonly used avoidant coping strategies during the COVID-19 pandemic. Since travel restrictions were imposed during the pandemic, university teachers could not freely travel to anywhere they wanted to go to relieve their stress. Hence, selfdistraction allowed university teachers to disengage from the stressful situation. Instead, they engage in pleasurable activities within the comforts of their home, such as reading books, playing games, and watching television (Allen & Leary, 2010). These were consistent with several studies during the pandemic, which showed that selfdistraction activities like playing video games (Barr & Copeland-Stewart, 2021) and watching TV series (Boursier et al., 2021) were able to provide a means of escape and even showed positive effects on wellbeing. On the other hand, venting allowed university teachers to express and share their emotions with others. This validated their negative feelings and even allowed them to garner sympathy from others. However, it should be noted that venting alone is insufficient and can worsen matters in the long run as it further escalates negative emotions among the users (Liverant et al., 2004; Vicary & Fraley, 2010).



University teachers also often used religious coping (M = 3.93). This was expected since the Philippines is generally known for its strong religious faith. Several studies (Fatima et al., 2021; Thomas & Barbato, 2020) have also affirmed that religious coping can be linked to lower depression and suicidal thoughts.

University teachers rarely used humor coping (M = 2.47) despite the emergence and prevalence of various COVID-19-themed humor in the country (Torres et al., 2020). While some studies showed that humor can reduce anxiety, increase sense of control, increase happiness, and lower stress (Bitterly & Schweitzer, 2021; Torres-Marin et al., 2022; Simione & Gnagnarella, 2023), it was not often practiced among the university teachers. This can be attributed to the lingering fear of the COVID-19 virus, as evident in the university teachers' relatively high frequency of experience with health-related stressors. This was supported by the study of Saricali et al. (2022), which showed that higher fear of the COVID-19 virus is associated with a lower sense of humor and higher hopelessness.

# Sociodemographic Variation in the Frequency of Use of Coping Strategies

As shown in **Table 7**, a significant difference (p<.05) was found in the frequency of use of approach-style coping strategies, religion, and humor between the male and female university teachers. In particular, it was found that female university teachers depended on approach-style coping strategies and religion more than male university teachers. On the other hand, male university teachers depended on humor more than female university teachers. These results agreed with the study of Babicka-Wirkus et al. (2021), which attributed the differences between the coping strategies of male and female participants to gender socialization. Specifically, women are socialized



to be more emotional and seek support in interpersonal relationships, while men are socialized to cope with their problems on their own or use humor. Previous studies also showed that women are often more religious than men (Rassoulian et al., 2021), especially among countries that are primarily composed of Christian populations (Schnabel et al., 2018), like the Philippines.

**Table 7.**The sociodemographic variation in the frequency of use of coping strategies by IFSU university teachers during the COVID-19 pandemic.

| Characteristics -        |                    | Coping Strategi    | es             |                   |
|--------------------------|--------------------|--------------------|----------------|-------------------|
| Characteristics -        | Approach-style     | Avoidance-style    | Religion       | Humor             |
| Overall                  | 3.57               | 2.30               | 3.93           | 2.44              |
| Sex                      |                    |                    |                |                   |
| Male                     | 3.44               | 2.30               | 3.57           | 2.70              |
| Female                   | 3.70               | 2.32               | 4.17           | 2.31              |
| Fvalue                   | 8.143              | 0.080              | 23.963         | 7.533             |
| P-value                  | .005*              | .778 <sup>NS</sup> | .000*          | .007*             |
| Age Group                |                    |                    |                |                   |
| 20 to 29                 | 3.64               | 2.38               | 3.80           | $2.60_a$          |
| 30 to 39                 | 3.65               | 2.34               | 4.07           | 2.54a             |
| 40 to 49                 | 3.48               | 2.15               | 3.75           | $2.34_a$          |
| 50 to 60                 | 3.48               | 2.27               | 4.06           | 1.94 <sub>b</sub> |
| Fvalue                   | 0.880              | 1.655              | 1.190          | 2.688             |
| P-value                  | $.452^{ m NS}$     | $.178^{ m NS}$     | $.315^{ m NS}$ | .048*             |
| Marital Status           |                    |                    |                |                   |
| Single                   | 3.62               | 2.41               | 3.84           | 2.67              |
| Married                  | 3.57               | 2.22               | 4.02           | 2.28              |
| Fvalue                   | 0.237              | 6.131              | 1.964          | 8.115             |
| P-value                  | .627 <sup>NS</sup> | .014*              | .163NS         | .005*             |
| <b>Employment Status</b> |                    |                    |                |                   |
| Permanent                | 3.46               | 2.26               | 3.94           | 2.30              |
| Contractual              | 3.72               | 2.35               | 3.91           | 2.62              |
| Fvalue                   | 7.862              | 1.246              | 0.055          | 5.432             |
| P-value                  | .006*              | .266 <sup>NS</sup> | $.815^{NS}$    | .021*             |
| Monthly Salary           |                    |                    |                |                   |
| 20k to 29k               | $3.68_a$           | 2.34               | 3.94           | $2.58_a$          |
|                          |                    |                    |                |                   |

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| 30k to 49k    | 3.39ь             | 2.26               | 3.85            | $2.32_{\rm a}$ |
|---------------|-------------------|--------------------|-----------------|----------------|
| 50k and above | 3.33 <sub>b</sub> | 2.15               | 4.00            | 1.81b          |
| Fvalue        | 4.453             | 1.123              | 0.184           | 5.307          |
| P-value       | .013*             | .327 <sup>NS</sup> | $.832^{\rm NS}$ | .006*          |

*Note.* Means not sharing subscripts differ significantly at a = .05, as indicated by Tukey's HSD Test.

The use of humor among the different age groups of university teachers was also found to be significantly different (p<.05). It was observed that as the age group increased, the use of humor decreased; this was especially true among university teachers belonging to the 50 to 60 age group whose use of humor was significantly lower than the rest of the age groups. This was consistent with the study of Jain and Jha (2020), which found a decrease in the use of humor with age. This can be attributed to the declining sense of humor with age (Svebak et al., 2006). Age differences in humor preferences may also be influenced by opinions about what constitutes suitable social behavior, with older persons being less inclined to laugh at jokes that do not fit their preferred humor style (Stanley et al., 2014). For example, unlike younger people, older people are less likely to enjoy aggressive jokes a type of humor that is used to put down, tease, ridicule, and make a mockery of other people - which was the second most prevalent type of humor in the country during the pandemic (Torres et al., 2020). The higher number of health comorbidities among older people (Peterfi et al., 2022) could also be why older university teachers used less humor. This is because the presence of health comorbidities is associated with the occurrence of anxiety and depression (Lee et al., 2022; Mishra et al., 2023); thus, these may hinder older university teachers from using humor. However, further study needs to be conducted to verify this,

<sup>\*</sup> p < .05; NS = not significant



as the present study did not collect any data on the comorbidities, anxiety level, and depression level of the target university teachers.

The use of avoidance-style coping strategies and humor significantly differed (p<.05) between the single and married university teachers of IFSU. In particular, single university teachers depended more on avoidance-style coping strategies and humor than married university teachers. These results agreed with the studies of Hossain et al. (2022) and Javed and Parveen (2021), which found that single individuals used avoidance-style coping strategies more than married individuals. These differences can be attributed to dyadic coping among married individuals. This allowed married individuals to face the stresses with their spouse/partner, while single individuals relied more on their internal resources to manage stress (Donato et al., 2021). Hence, dyadic coping may help them lean towards approach-style coping strategies rather than avoidance-style coping strategies.

Contractual university teachers were found to use varied coping strategies more often than permanently employed university teachers. This difference was marked by the use of approach-style coping strategies and humor (p<.05). These differences can be attributed to the fact that contractual employees are generally more vulnerable to work-related stress due to less control, limited support, high work demands, and job insecurity, among others (Ghezzi et al., 2020).

The use of approach-style coping strategies and humor among university teachers belonging to different salary range groups were found to be significantly different (p<.05). Specifically, it was observed that university teachers with lower salary range have higher use of both approach-style coping strategies and humor than university teachers belonging to the higher salary range. This was supported by the study of Yang et al. (2022), which found that lower-income people



were more likely to experience the economic distress brought about by the COVID-19 pandemic than higher-income people because they generally have lower buying power. This was further aggravated by the continuous price increase of several commodities and services in the Philippines during the pandemic.

# Variation in the Frequency of Experience with Stressors and Frequency of Use of Coping Strategies with Perceived Stress

**Table 8.**The variation in the frequency of experience with stressors with perceived stress.

| Perceived Stress — | Stressors      |            |       |                |  |
|--------------------|----------------|------------|-------|----------------|--|
|                    | Health         | Finance    | Work  | Personal       |  |
| Mild               | 3.28           | 2.25a      | 1.87a | 2.00a          |  |
| Moderate           | 3.71           | $3.10_{b}$ | 2.85b | $2.47_{\rm a}$ |  |
| Severe             | 3.95           | $2.85_{c}$ | 3.16c | 2.85b          |  |
| Fvalue             | 2.637          | 6.893      | 8.713 | 5.515          |  |
| P-value            | $.074^{ m NS}$ | .001*      | .000* | .005*          |  |

*Note.* Means not sharing subscripts differ significantly at a = .05, as indicated by Tukey's HSD Test.

It can be seen in Table 8 that the more frequently university teachers experienced the stressors, the higher their perceived stress. University teachers with severe perceived stress experienced the stressors more frequently than those with moderate and mild perceived stress. It was also found that the frequency of experience on the health-related stressors was not significantly different (p>.05) for mild, moderate, or severe levels of perceived stress. This means that these stressors were equally felt and experienced by all university teachers during the pandemic.

<sup>\*</sup> p < .05; NS = not significant



**Table 9** *The variation in the frequency of use of coping strategies with perceived stress.* 

| Perceived Stress | Coping Strategies |                   |                |       |  |
|------------------|-------------------|-------------------|----------------|-------|--|
|                  | Approach-style    | Avoidance-style   | Religion       | Humor |  |
| Mild             | $3.04_{a}$        | 1.90a             | 4.08           | 1.67a |  |
| Moderate         | 2.58 <sub>b</sub> | 2.26a             | 3.87           | 2.44b |  |
| Severe           | 3.83c             | 2.71 <sub>b</sub> | 4.22           | 2.80b |  |
| Fvalue           | 4.383             | 10.945            | 1.917          | 3.859 |  |
| P-value          | .014*             | .000*             | $.150^{ m NS}$ | .023* |  |

*Note.* Means not sharing subscripts differ significantly at a = .05, as indicated by Tukey's HSD Test.

Table 9 shows that as the perceived stress of university teachers increased, so did their frequency of use of coping strategies. University teachers with severe perceived stress used coping strategies more frequently than those with moderate and mild perceived stress. It was also found that religious coping was not significantly different (p>.05) for mild, moderate, or severe levels of perceived stress. This means that religious coping was widely used among university teachers, regardless of the intensity of their feelings of stress.

#### Limitations of the Study

This study used three questionnaires (PRPSQ, SIQ, and BriefCOPE), composed of single-choice, close-ended Likert items, to measure the perceived stress, frequency of experience with stressors, and frequency of use of coping strategies among university teachers of IFSU during the COVID-19 pandemic. Hence, the responses from university teachers were limited to the available choices and could not capture the nuances of the respondents' actual experiences or opinions. It is recommended that a case study be conducted to fully grasp the specific

<sup>\*</sup> p < .05; NS = not significant



and contextualized experiences of stress and the use of coping strategies by university teachers. In addition, only 56.9% of the target population responded to the questionnaires. Thus, the results of this study cannot be generalized to the entire teaching community of IFSU. Stress-related variables can also be measured, such as job satisfaction, burnout, anxiety, depression, and student performance, as explored in various studies (De Francisco et al., 2016; Herman et al., 2020; Chen et al., 2020). Since the public health response to the COVID-19 pandemic has become more relaxed across the globe as of this writing, and face-to-face classes have returned, it is recommended that a longitudinal study be conducted. The longitudinal study can look into the changes in experiences of stress and the use of coping strategies by university teachers as the situation returns to pre-pandemic teaching-learning processes.

#### **Conclusions and Recommendations**

This study has shown that most university teachers at IFSU experienced moderate perceived stress during the COVID-19 pandemic. It was also found that the more frequently university teachers experienced the stressors, the higher their perceived stress. Thus, IFSU must focus on alleviating the stressors to retain high-quality teaching, as it can positively impact the overall quality of education provided by IFSU. Among the stressors that contributed to stress, it was found that university teachers often experienced health-related stressors. To address this, IFSU can initiate a health and wellness package for university teachers. This may include regular check-up programs with partner health facilities and doctors, discounted basic laboratory fees, and health insurance covering medical, dental, and vision expenses. Exercise programs (e.g., dance fitness, yoga, and volleyball) can also be organized to help university



teachers stay fit and, at the same time, provide an avenue for socialization with one another. Finance-related stressors were sometimes experienced, attributed to a shortage of financial resources and daily necessities. A loan board can be organized by IFSU, which can work with financial institutions to negotiate favorable loan terms for university teachers. Similarly, work-related stressors were sometimes experienced owing to heavy workloads, irregular work hours, and stress with teaching online. IFSU can revise its policies concerning flexible work schedules to give university teachers a better work-life balance. IFSU can also review workload policies and make adjustments to ensure they can handle their responsibilities. It was also found that female university teachers experienced health-related stressors more than male university teachers. In addition, single university teachers experienced personal and well-being-related stressors more than married university teachers. Hence, IFSU should also focus on university teachers who belong to these more vulnerable groups. In particular, IFSU can organize a social support group facilitated by a professionally-trained social worker or psychologist so that university teachers can share their problems, seek companionship, and cope with stress healthily.

The study has also shown that as the perceived stress of university teachers increased, so did their frequency of use of various coping strategies. Religious coping was found to be often used among university teachers. Religious coping can be reinforced by conducting a regular "Recollection Day" program facilitated by trained non-sectarian personnel. Through this program, university teachers can do activities such as self-reflection, meditation, sharing life experiences, self-appreciation, appreciation of others, seeking forgiveness, and praying. Most university teachers also used approach-style coping



strategies compared to avoidance-style coping strategies. This can also be reinforced by providing workshops on healthy stress management techniques. Access to counseling services can also be provided to help them manage personal or work-related stressors. While some studies found that humor can decrease stress, it was rarely used among university teachers in this study. Hence, workshops can be designed to help university teachers cultivate positive emotions, such as humor, gratitude, and optimism, to cope with stress in times of adversity. Through these recommendations, IFSU can help to promote a culture of resilience, problem-solving, and well-being among university teachers.

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