

## **Work Stress, Teaching Load, and Teaching Satisfaction of Faculty Members in the National University**

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**Abstract:** The importance of managing stress in the work environment has been emphasized as it impacts productivity. This study focused on the relationships among work stress, teaching load, and teaching satisfaction of faculty members at the University of the Philippines Los Baños, Laguna. A total of 147 faculty members from different colleges within the university completed the self-administered questionnaire online. The respondents had an average teaching load of 8.07 for the semester. Generally, they felt slight to moderate pressure and stress ( $M = 73.55$ ;  $SD = 25.42$ ). Also, they felt somewhat satisfied with their profession as educators ( $M = 18.65$ ;  $SD = 4.76$ ). The relationships among the three variables were determined through Spearman's rank correlation coefficient. Results showed that work stress has a significant inverse relationship with job satisfaction,  $r(145) = -.29$ ,  $p = .000$ . Also, results showed that teaching load has a significant inverse relationship with job satisfaction,  $r(145) = -.17$ ,  $p = .030$ . Recommendations were made to establish programs to help in managing work stress and ensuring faculty well-being.

**Keywords:** Educators, Faculty Members, Job Satisfaction, Teaching Load, Work Stress

### **A. Introduction**

Stress in the work environment is unavoidable but can be reduced. Work stress is a reaction to stimuli experienced in a job that may lead to negative consequences to the individuals exposed to it (Muchinsky, 2007). The World Health Organization (WHO, 2024) recognized the importance of reducing and managing stress in the work environment. When individuals are exposed to a high level of work stress, they are prone to health outcomes such as cardiovascular disorders, musculoskeletal disorders, mental health problems, and low productivity (Lukan et al., 2022; WHO, 2024),

University faculty members experience a great deal of stress daily, as they are not only responsible to teach and transfer knowledge and skills to their students but also engage in research and extension services as part of their job description (Meng & Wang, 2018). In some cases, they are also postgraduate students as accomplishing a postgraduate degree helps in becoming tenured and/or promoted. Apart from these responsibilities, they also have other functions such as participating in conferences as a resource person, attending to the needs of their respective college and department in the absence of supervisors (Tan, 2017) and being part of committees in the department, college and/or university levels. In a study of faculty members in public universities in the Philippines, it was found that having a full-time teaching job was related to work stress along with inadequate salary, work demands that interfere with personal activities, long and

numerous meetings, high self-expectations, and preparing a manuscript for publication (Tan, 2017).

Several factors can influence the stress levels of faculty members. These include and are not limited to: work overload; work-life imbalance; increase in student population; lack of financial funding; lack of resource and recognition; lack of administrative support; and years of teaching (Chung & Kowalski, 2012; Gartia & Sharma, 2013; Gupta et al., 2015; Meng & Wang, 2018; Merchant & Shastri, 2013; Rafeeq & Harish, 2015; Tan, 2017).

Although workload may not be reflected on the list, it may contribute to the stress being experienced by faculty members. This is why workload should be distributed in such a way that the amount of work to be done should not result in stress and burnout over time. Faculty members are expected to serve for a minimum of 40 hours a week. In the case of the University of the Philippines Los Baños (UPLB), the required and normal teaching load is 12 units per semester (UP Diliman, 2003). No faculty should teach less than 6 units per semester and the remaining 6 units can be satisfied with non-teaching activities such as a combination of research or creative work, public service or community engagement, authorized graduate studies, and administrative work (UP Diliman, 2003).

Another important factor to consider is job satisfaction. It is defined as the employee's perception and affective state related to their current job, expressed with feelings of joy and/or contentment or frustrations and disappointment (Oktaviani & Sopiah, 2022). Individuals who are satisfied with their job and career are enthusiastic and passionate to finish their tasks. In a Philippine university, De Guzman and colleagues found that job satisfaction was related to opportunities for personal and professional development, contribution to others' development, sense of fulfillment, and job security (Oktaviani & Sopiah, 2022). However, lower satisfaction was brought about by bureaucratic documentation procedures, perceived unfairness in promotion scheme and evaluation procedures, inadequate benefits, and unsatisfactory workplace conditions.

The teaching industry is a stressful field of work (Wiggins, 2015) but the experiences may be different depending on the context. Related literature in the Philippine context has looked into faculty stress (Betonio, 2015; Colacion-Quiros & Gemora, 2016; Tan, 2017). There are some studies which delved into faculty job satisfaction only (Bongalonta, 2022; De Guzman & Depositario, 2019; Loquias & Sana, 2013; Mendoza, 2024). Thus, it is crucial to investigate the relationships among work stress, teaching load, and job satisfaction of faculty members at the University of the Philippines, Los Baños, Laguna to present these constructs in the Philippine context.

## **B. Methods**

The study used a correlation research design to determine the relationships among work stress levels, teaching load, and teaching satisfaction. Likewise, a cross-sectional approach was adopted for the study.

The study was conducted in the following colleges of UPLB: College of Agriculture and Food Science; College of Arts and Sciences; College of Development Communication; College of Economics and Management; College of Engineering and Agro-Industrial Technology; College of Human Ecology; College of Forestry and Natural Resources; and College of Veterinary Medicine. The mentioned colleges offer undergraduate degree

programs. These colleges consist of different departments and have different working environment and dynamics.

The participants of the study are the faculty members with at least three years of teaching experience at the university. The total population of faculty members with three years of teaching experience was 808. Stratified sampling was employed on the population of the university. This was computed to know the fair number of participants from the total population. The determined sample size was 153 at 90% level of confidence, wherein at least 19 should participate from each college for better representation. The sample size was validated and computed by the Institute of Statistics (InSTAT), UPLB. Only 147 respondents were able to participate (96% response rate). Majority of the respondents are aged 31-40 years, females, single, and from the College of Arts and Sciences. The socio-demographic characteristics of the faculty members are seen in Table 1.

**Table 1. Socio-demographic Characteristics of The Faculty Members**

Participant Characteristics	Frequency	Percentage
<b>Age</b>		
Did not answer	20	13.61
21 to 30	35	23.81
31 to 40	51	34.69
41 to 50	14	9.520
51 to 60	16	10.88
60 and older	11	7.480
<b>Sex</b>		
Did not answer	9	6.120
Male	55	37.41
Female	83	56.46
<b>Civil Status</b>		
Did not answer	73	49.66
Single	41	27.89
Married	30	20.41
Widowed	3	2.040
<b>College</b>		
College of Agriculture and Food Science	16	10.88
College of Arts and Sciences	47	31.97
College of Development Communication	8	5.440
College of Economics and Management	21	14.29
College of Engineering and Agro-Industrial Technology	20	13.61
College of Human Ecology	26	17.69
College of Forestry and Natural Resources	4	2.720
College of Veterinary Medicine	5	3.400

The data was gathered through a self-administered questionnaire which was divided into six parts: (1) Information Sheet; (2) Certificate of Consent; (3) Demographic Data of Respondents; (4) Work Stress; (5) Teaching Load; and (6) Job Satisfaction. The questionnaire was handed out individually to the faculty members once consent was given. In determining the stress level of the respondents, the Faculty Stress Index (FSI),

which was designed to identify kinds of stressful situations faculty members experience was used (Gmelch, 1993; Gmelch et al., 1986). The 31 items were rated on a 5-point Likert scale from "no to very slight pressure" to "excessive/extreme pressure" with an option to choose "not applicable." Previous studies (Jing, 2008; Tan, 2017) have used this scale and a Cronbach's alpha of 0.92 was determined (Tan, 2017)). There are five subscales to identify the stressors: reward and recognition; time constraints; departmental influence; professional identity; and student interaction. The sum was computed from the ratings and the higher the score, the higher the level of faculty stress. The Teaching Satisfaction Scale (TSS) was used to assess the teaching satisfaction of the university faculty members (Ho & Au, 2006). It is composed of five items rated on a 5-point Likert scale from "not satisfied" to "very satisfied." The determined Cronbach's alpha was 0.77 (Ho & Au, 2006). The sum from the ratings to the items were computed. Higher scores in the scale indicates a high degree of job satisfaction.

The questionnaire was sent to the respondents through an e-mail. In compliance with the ethical standards for research, an official and complete process of informing the participants and acquiring their consent was ensured. This was done through an informed consent form presented in the first part of the questionnaire. The letter included key information on the objectives and its use in the academe, as well as the data privacy notice to ensure confidentiality. This upholds the principles of honesty and transparency and demonstrates the prioritization of the overall safety of everyone involved. The notice for confidentiality and consent emphasized that participation in the study is entirely voluntary. The participants were given the freedom to decide whether to take part in the study or not and were informed that any information collected shall only be used for the research and will be kept confidential. This includes the anonymity of the participant's identity to guarantee protection and privacy. Moreover, the participants were given the right to withdraw their participation in the research at any time at their discretion.

The study used descriptive statistics on the five mentioned subscales of work stress to determine the topmost contributor. The relationships among work stress, teaching load, and teaching satisfaction were determined through Spearman's Rank Order Correlation. The same correlation tool was used on the other variables that may influence the stress level of the faculty members. Through this, the strength and direction of the relationship among the variables were determined. The subscales were also correlated with teaching load and teaching satisfaction. All statistical analyses were performed using the software SPSS Statistics.

## **C. Results and Discussion**

### **Faculty Job Stress Levels**

Table 2 shows the distribution of scores in the FSI and 41.5% of the respondents are in the mild stress and pressure category. The total faculty stress scores ranged from 13 to 135 out of the total possible score of 155. Majority of the faculty members are in the mild stress and pressure category followed by those in the moderate category. Jing (2008) had a similar finding based on the FSI with faculty from Chinese universities who also reported moderate levels of stress. Similarly with Filipino faculty members, Tan (2017) found that the FSI results showed slight to moderate stress when dealing with the stressors listed in the FSI. It is possible that the faculty members are already adjusted

to the demands of being a faculty member and their experiences in teaching contributed to the result of the FSI (Colacion-Quiros & Gemora, 2016). They may have developed effective coping mechanisms and stress management techniques being in the teaching field for some time already.

**Table 2. Distribution of Scores in The Faculty Stress Index**

Category/Score	Frequency	Percentage (n=147)
Low stress and pressure (1-31)	2	1.36
Mild stress and pressure (32-62)	61	41.5
Moderate Stress and pressure (63-93)	51	34.7
Much stress and pressure (94-124)	30	20.4
Extreme stress and pressure (125-155)	3	2.04

As shown in Table 3, with a mean of 73.55 ( $SD = 25.42$ ), the faculty members, in general, felt moderate pressure and stress. Table 3 also shows that among the five subscales, it is time constraints which had the highest mean at 26.55 followed by rewards and recognition. Tan (2017) also found similar results among faculty in public universities, with time constraints as the greatest stressor followed by rewards and recognition.

**Table 3. Descriptive Statistics Of The Faculty Stress Index**

Subscale	Number of Items	Total Possible Score	Mean	SD	Cronbach's $\alpha$
Rewards and Recognition	8	40	18.75	7.728	.919
Time Constraints	10	50	26.55	8.068	.927
Departmental Influence	4	20	8.068	4.222	.892
Professional Identity	4	20	9.489	4.198	.846
Student Interaction	5	25	10.93	4.599	.859
Total Faculty Stress Score	31	155	73.55	25.42	.954

Table 4 shows the summary of scores per subscale and statement which can help explain the results. Generally, the top three sources of stress are attending meetings which take up too much time, securing funding for research, and teaching/advising inadequately prepared students.

In terms of time constraints, the respondents felt the most pressure and stress when it comes to attending meetings which take up too much time, followed by participating in the work of departmental or university committees, and having insufficient time to keep abreast with current developments in the field. Similarly, Colacion-Quiros & Gemora (2016), Tan (2017), and Iqbal & Kokash (2011) found that meetings and conferences are considered as topmost contributors of high stress levels in the teaching field. In UPLB, the faculty must perform a tripartite function of instruction, research, and extension or public service. In all these areas, meetings may abound since there are department, college, and university faculty meetings. A faculty is usually a member of some department, college, and/or university committee (Wallingford et al., 2014) and

the meetings and tasks related to these will require time. With the teaching, research work, and extension activities, it is likely that the faculty has limited time for simultaneous professional development. Parveen (2013) found that this is the highest stressor for the faculty. They are also expected to demonstrate that they can keep growing professionally and the limited time to do so becomes a stressor.

In the rewards and recognition subscale, the faculty members felt the most pressure and stress when there are no clear criteria for evaluating service activities with a mean of 2.589. This was followed by a lack of congruency in institutional, departmental, and personal goals (2.551), and not having clear criteria for evaluation of research and publication activities (2.483). It can be seen here that the stress is due to organizational and structural aspects (Jing, 2008). In higher education, the evaluation of faculty performance can be challenging as this is related to promotion, hiring and rehiring, tenure and termination processes (Hardré & Cox, 2009; Patimo, 2020). This challenge could be attributed to promotion criteria which are poorly understood for various reasons and disagreements at various institutional levels about the evaluation tools to be used (Wallingford et al., 2014). Service activities in the university may include committee work, mentoring, and technical assistance to organizations in the community. Research and publication activities may include journal article publication, paper and poster presentations in conferences or professional meetings, research projects, and book writing. It is crucial that indicators or standards for performance evaluation are carefully crafted and clearly understood by the faculty and consistently applied in promotion processes to lessen work stress. Also, the lack of congruency in institutional, departmental, and personal goals needs to be addressed as this may affect faculty productivity, motivation, and satisfaction. Discussions with senior faculty and concerned administrators are needed in clarifying and communicating what values the university upholds and what activities and outputs it rewards (Wallingford et al., 2014).

**Table 4. Summary Of Scores Per Statement In The Faculty Stress Index (N=147)**

Statement	Possible Score	Mean
<b>REWARDS AND RECOGNITION</b>		
Receiving inadequate university recognition for community service	5	1.918
Having insufficient reward for institutional/departmental service	5	2.319
Receiving insufficient recognition for teaching performance	5	2.293
Not having clear criteria for evaluating service activities	5	2.589
Lacking congruency in institutional, departmental, and personal goals	5	2.551
Receiving insufficient institutional recognition for research performance	5	2.204
Receiving inadequate salary to meet financial needs	5	2.353
Not having clear criteria for evaluation of research and publication activities	5	2.483
<b>TIME CONSTRAINT</b>		
Participating in the work of departmental or university committees	5	2.918

Having insufficient time to keep abreast with current developments in my field	5	2.905
Assignment of duties which takes me away from my office	5	2.673
Being interrupted frequently by telephone calls and drop-in visitors	5	2.020
Having inadequate time for teaching preparation	5	2.483
Writing letters and memos and responding to other paperwork	5	2.422
Having insufficient time for performing the service function	5	2.435
Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday	5	2.735
Attending meetings which take up too much time	5	3.149
Having job demands which interfere with other personal activities (recreation, family, and other interests)	5	2.646
<b>DEPARTMENTAL INFLUENCE</b>		
Trying to influence my acting supervisor and decisions which affect me	5	2.095
Resolving differences with my acting supervisor	5	1.918
Lacking personal impact on department/institutional decision-making	5	2.192
Not knowing how my acting supervisor evaluates my performance	5	1.890
<b>PROFESSIONAL IDENTITY</b>		
Making presentations at professional conferences and meetings	5	2.163
Imposing excessively high self-expectations	5	1.986
Securing financial support for my research	5	3.014
Preparing a manuscript for publication	5	2.396
<b>STUDENT INTERACTION</b>		
Evaluating the performance of students	5	2.163
Having students evaluate my teaching performance	5	1.986
Teaching/advising inadequately prepared students	5	2.993
Resolving differences with students	5	2.346
Evaluating the performance of students	5	1.898

Thirdly, in the student interaction subscale, the faculty members felt the most pressure and stress when they are teaching or advising students who are inadequately prepared. There is a diversity of students who enter the university. It is possible that these students enter the classroom with their prior knowledge or lack of it and this influences how they filter and interpret what they are learning (Ambrose et al., 2010). Faculty members tend to feel pressure and stress when the knowledge of students is insufficient for the required tasks (Iqbal & Kokash, 2011), underperform based on standards (Betonio, 2015) and is inaccurate as it can interfere with or impede new learning they will present (Ambrose et al., 2010). The faculty may feel stress from efforts to give the foundational concepts which they expected would be present when the students enrolled in the course. It is also possible that the motivation of students to learn is not at par with the motivation of the faculty members to teach (Ambrose et al., 2010). Faculty members prepare the

materials, the lessons, syllabus, and requirements and hope that students will appreciate what they have invested in preparing the course.

For the subscale of professional identity, the faculty members felt the most pressure when securing enough financial support and funding for their research followed by the need to prepare a manuscript for publication. Functions like doing research and manuscript writing are factors that contribute to high stress levels (Akbar & Naseem, 2012; Meng & Wang, 2018; Parveen, 2013). Having problems in securing financial support for one's research exacerbates the stress further (Reevy & Deason, 2014). There is a possibility for the research to be cancelled when there is a lack of budget and funding. No research may mean no local or international publications which is not acceptable in a "publish or perish" academic culture. Scholarly publications are necessary to get promoted in the academe. It was pointed out in the UPLB Teacher's Guide to Academic Policies and Procedures (UPLB, 2002) that a faculty member can be promoted to University Professor if he/she is an "outstanding scholar and scientist" based on his/her publications and research in his principal field of study and in allied fields. There is a certain number of required publications if a faculty member desires to be promoted.

Lastly, the topmost contributors of pressure and stress to the respondents for the departmental influence subscale are having less or no personal impact on department/institutional decision-making and trying to influence the acting supervisor's decision making which affect the faculty. This is about a lack of influence on departmental affairs or even feelings of not being valued by the immediate supervisor, usually the Chairperson. Autonomy and influence on administrative decision making is inversely related to stress (Pearson & Moomaw, 2005). There are many young faculty and it is likely that they are not yet in administrative positions, thus, their performance is evaluated by a more senior faculty, and they may feel that their voices are not heard during unit planning and decision-making activities.

Overall, the top five sources of faculty pressure and stress are: attending meetings which take up too much time ( $M=3.149$ ), securing enough financial support and funding for research ( $M = 3.014$ ), teaching/advising inadequately prepared students ( $M = 2.993$ ), participating in the work of departmental or university committees ( $M = 2.918$ ), and having insufficient time to keep abreast with current developments in my field ( $M = 2.905$ ). Of these, three can be found under the subscale of time constraints which emphasizes the challenges of the faculty in performing their tripartite functions of teaching, research and extension, including committee memberships which all require their time. University administrators should establish faculty welfare policies which will help in achieving work-life balance and programs which will help in securing research funds.

### **Teaching Load of the Faculty**

Table 5 shows the teaching load of faculty members wherein the average teaching load is 8.07 or around 3 courses. Nearly half (48.3%) of the faculty members who participated in the study have a teaching load ranging from 7 to 9 which means two to three courses to handle with the number of students varying depending on whether these courses are lecture courses or laboratory courses or whether these are service

courses or major courses. Service courses like general education (GE) courses have larger class sizes as compared to major courses.

It is worthy to note that around 29% have teaching loads of 10 units or more which means around three to four courses. This is already heavy since this will require more preparations if the courses are different from each other and with more students to attend to. Akbar & Akhter (2011) found that workload contributes to stress.

Some of the faculty members have no or low teaching load. It is possible that these faculty members are on official leave, study leave, have administrative positions or secondment, and/or on maternity leave. There are also faculty members who are studying part-time and may be working on their thesis/dissertation. Moreover, classes which have less than 10 students enrolled are usually dissolved to save on university resources. Another factor is the limited availability of classrooms which may have impacted the number of courses which can be offered for the semester.

Based on the Teacher's Guide to Academic Policies and Procedures (UPLB, 2002), faculty members shall have at least six (6) units of teaching load per semester. This minimum number is usually a requirement for incentives such as promotions. The teaching load distribution in the university is decided upon at the unit or department level, thus, it may vary from unit to unit depending on the number of faculty available, the number of courses offered, the number of available classrooms, and the academic positions/roles of the faculty.

**Table 5. Teaching Load Units Of Faculty Members In UPLB**

Number of Teaching Load Units	Frequency	Percentage (n=147)
0 to 3	14	9.52
4 to 6	19	12.9
7 to 9	71	48.3
10 to 12	36	24.5
13 and above	7	4.76

### **Job Satisfaction of the Faculty**

With a mean of 18.65 ( $SD = 4.76$ ), the faculty members, in general, were somewhat satisfied with their job in the academe (Table 6). The total job satisfaction scores of the faculty members ranged from 5 to 25 out of a possible score of 25 with a Cronbach alpha score of .909 which is higher than the one provided by Ho & Au (2006).

Table 6 shows their agreement with the specific statements of the TSS. The highest mean was for the statement which is about their satisfaction with their job as an educator. De Guzman & Depositario (2019) found in their study of faculty members from a Philippine university that around 87% were satisfied to very satisfied with their job in the university. This result was due to the opportunities for personal and professional growth, and the freedom and flexibility the job provides for the faculty to achieve work-life balance. Bongalonta (2022) found that faculty members from state colleges and universities in Bicol were highly satisfied with their jobs mainly due to being in the profession and harmonious work relationships with peers and supervisors. Loquias & Sana (2013) also found that the faculty members were generally satisfied with their jobs due to collegiality, specifically the support they received from their deans. Satisfaction in teaching is based on the concept of job satisfaction by Locke (1969, as cited by Ho &

Au (2006). It is the pleasurable emotional state resulting from the appraisal of one's job and achieving or facilitating one's job values in terms of being an educator. A person with a high job satisfaction has positive feelings about the job and related job components (Bongalonta, 2022).

The second highest mean was for the statement about the faculty members considering their job as educators as close to their ideal. It implies that there are minor concerns or problems but overall, their job meets their set standards. Chamundeswari (2013) pointed to some factors which can increase job teaching satisfaction such as the work itself, recognition, infrastructure facilities, salary scale, working hours, class size, number of classes handled per day, attitude of students, and supportive colleagues. De Guzman & Depositario (2019) also highlighted six relevant factors related to job satisfaction-workload, social and societal interactions, growth and development, compensation and benefits, administration, and classroom experience. These may explain some reasons why they are satisfied with being educators since having some of these may make them feel that their job as educators is close to their ideal. It is crucial that the university should continue creating an enabling physical and social environment supportive of personal and professional growth.

**Table 6. Descriptive Statistics Of The Teaching Satisfaction Scale**

Statement	Possible Score	Mean	SD
In most ways, being an educator is close to my ideal	5	3.939	1.093
My conditions of being an educator are excellent	5	3.673	1.001
I am satisfied with being an educator	5	3.993	1.101
So far, I have gotten the important things I want to be an educator	5	3.551	1.093
If I could choose my career over, I would change almost nothing	5	3.489	1.251
Total Teaching Satisfaction Scale Score	25	18.65	4.76

### **Relationship of Work Stress, Teaching Load, and Job Satisfaction of the Faculty Members**

The summary of correlation values is shown in Table 7 based on two-tailed Spearman's rank correlation coefficients. Work stress has a significant inverse relationship with job satisfaction. As work stress increases, job satisfaction decreases. Loquias & Sana (2013) also found an inverse relationship between these two variables among Filipino faculty members especially among assistant professors most likely due to lower academic rank and tenure concerns.

It is important to identify the factors that can influence both work stress and teaching satisfaction (Hoboubi et al., 2017) since these two are important factors that affect workforce productivity. Oktaviani & Sopiah (2022) in a review of the literature found that work stress is related to job satisfaction. When faculty members are stressed, a negative orientation towards their work arises and emotions such as feelings of insecurity, discontent, or uselessness may manifest. These lead to stress which can adversely affect their satisfaction and performance at work. Thus, identifying and managing the factors that can induce work stress can be helpful in establishing a healthy work environment and higher job satisfaction for the faculty members.

**Table 7. Correlation Of The Variables**

	Teaching load	Work stress	Job satisfaction
Teaching load		-.012	*-.179
Work stress	-.012		*-.290
Job satisfaction	*-.179	*-.290	

\*Significant at  $\alpha = 0.05$

Table 8 shows that all subscales of the faculty stress index (FSI) had significant inverse relationships with job satisfaction. There are 4 (four) categories that explain several variables that are related to job satisfaction, including leadership, salary, organizational commitment, and job stress. The relationship between the subscales of faculty stress index and teaching load was not significant and were all weak. However, teaching load has a significant inverse weak relationship with job satisfaction.

When there is work stress related to inadequate rewards and recognition, time constraints related to a high workload, concerns with the department chair, issues in building their professional identity, and issues with student interactions, job satisfaction decreases. In relation to the subscale on professional identity, job satisfaction may decrease when there are problems securing financial research support and preparing for publication. Not being able to publish research can lead to lower chances of promotion and career advancement. Likewise, it is conflicting with their role as educator. As pointed out by Meng & Wang (2018), the role of a university faculty member is not only about teaching. It also involves other responsibilities such as administrative work, conducting research, and extension services, which may be additional sources of stressors and can lower teaching satisfaction.

The job satisfaction of faculty members decreases when they experience a great deal of stress related to rewards and recognition. Based on the results of the FSI, the faculty members felt pressure and stress when they do not receive sufficient recognition for teaching ( $M = 2.295$ ). It is possible for the faculty members to feel that their profession as educators is least recognized regardless of hard work and perseverance. Apart from teaching, their role as researcher may play a more important role in terms of receiving rewards and recognition during promotions and tenure. De Guzman & Depositario (2019) found that the promotion scheme, evaluation procedures, compensation and benefits were factors related to low job satisfaction. Bongalonta (2022) found that the performance-based bonus (PBB) received by the faculty was an indicator of low job satisfaction since the faculty felt that the bonus they receive is not congruent with their actual performance. Siegrist (2017) presented the effort-reward imbalance model to explain this situation where the individual perceives an imbalance in the reciprocity between his/her great efforts given to the job versus the low rewards in terms of salary, tenure, promotion, and recognition.

**Table 8. Correlation Among Subscales Of Faculty Stress Index, Teaching Load, And Job Satisfaction**

	Rewards and Recognition	Time Constraints	Departmental Influence	Professional Identity	Student Interaction
Satisfaction	*-.262	*-.254	*-.200	*-.290	*-.238
Teaching load	-.006	-.039	-.071	.110	.08

\*Significant at  $\alpha = 0.05$

Stress related to time constraints is associated with lower job satisfaction. In this subscale, they consider attending meetings as the top contributor of pressure and stress because it takes up too much time ( $M = 3.171$ ). Considering that they have multiple responsibilities, faculty members are likely to feel fatigue and burn out when other functions are consuming most of their time rather than their main responsibility as educators.

Faculty members are likely to feel less satisfaction with teaching when they feel pressure and stress related to student interaction. Based on the results of the FSI, faculty members felt the most pressure and stress when they face and teach inadequately prepared students. The quality of students admitted into the program and student behaviors are related to job satisfaction (De Guzman & Depositario, 2019; Loquias & Sana, 2013). Teaching satisfaction tends to decrease when students show they are unmotivated or are not at par with what faculty members prepared in terms of content and requirements. Since being an educator is close to the faculty members' ideal job and profession, seeing students do poorly make them feel that their teaching is inefficient or inadequate.

The satisfaction faculty members get from their job decreases when there is greater stress related to departmental influence. This is important to note since having autonomy and impact on decision-makings being done in their department and/or institution can impact the way they view their job. As pointed out by Pearson & Moomaw (2005), having influence in administrative decision-making can contribute to lower stress. Generally, the social working environment is also crucial as highlighted by Mendoza (2024). Collaboration, professional treatment, and supportive relationships play a role in job satisfaction.

Lastly, teaching load has a significant inverse weak relationship with job satisfaction. As teaching load increases, job satisfaction decreases. De Guzman & Depositario (2019) found that overall workload including teaching load had the lowest contribution to overall job satisfaction. The number of courses taught has an impact on job satisfaction (De Guzman & Depositario, 2019). It is possible that faculty members become dissatisfied as they perform their job mainly because increasing teaching load under inadequate working conditions is un motivating. Administrators and students have expectations that faculty members are prepared to present quality lessons despite being under a great deal of stress, adding pressure. Mendoza (2024) highlighted the importance of institutional support and supportive work environments to job satisfaction.

#### **D. Conclusion**

This study contributed evidence to the intersect of faculty work stress, teaching load, and job satisfaction. In the systematic literature review of Oktaviani & Sopiah (2022), only two studies of the ten most cited studies on job satisfaction dealt with job stress but with managers and doctors as respondents. The current study found that faculty members felt slight to moderate pressure and stress with their teaching. They felt the most pressure and stress due to attending meetings which take too much time and securing research funds. The average teaching load of the sample is 8.07 or around three courses. In terms of teaching satisfaction, the faculty members felt somewhat satisfied with their job as educators.

The study verified that as faculty stress increases, job satisfaction decreases. Further, it provided evidence that as specific stressors related with rewards and recognition, time constraints, departmental influence, professional identity and student interaction increase, job satisfaction decreased. Another significant contribution is the finding that as teaching load increases, job satisfaction decreases. With the results from the study, it can be gleaned that the teaching load requirement varies according to what college the faculty members are from. The stress level experienced by faculty members may vary according to their working environment and conditions and office dynamics. There might be other external factors such as family relationships and the natural environment that can contribute to and/or affect their work stress.

Despite the findings, there are limitations to be noted. The study only considered the relationships among work stress, workload, and job satisfaction. It is possible that there are other internal and external factors that can contribute to work stress that are not in the faculty stress index (i.e. type of class teaching, hours of teaching, personality traits, mental health state) which can be investigated in future studies. Moreover, there are limited studies that include the amount of workload in relation to work stress and job satisfaction. The defined workload in this study only considered the numerical equivalent of it and did not dwell on how it affects the mental, physical, and temporal well-being of the faculty members. It is recommended that a tool appropriate for Filipino faculty members be constructed to evaluate the workload demands and relate it with work stress and job satisfaction.

The study focused only on faculty members in the university with at least three years teaching experience in colleges that offer undergraduate programs. The results of the study cannot be generalized to the whole university because it did not include colleges and institutions that offer graduate programs. The job satisfaction and stress experienced by the faculty members may not be the same throughout the semester and academic years. It is recommended that future researchers consider using a weekly evaluation tool for a semester to see what the main contributors of stress are based on the semestral schedule. The study deployed a quantitative approach, and interpretations of the results are limited only based on the results of the survey. It is recommended to incorporate a sequential explanatory research design wherein the latter part will be a qualitative method to focus on the lived experiences of the faculty on the intersect of workload, stress, and job satisfaction. It could also include delving into stress management and coping strategies of faculty members.

Lastly, based on the results of the subscales of the faculty stress index, it is recommended that the university establish education and intervention programs such as

work stress management, work-life balance, and coping strategies to help the faculty deal with their work stressors, and prevent burnout and resignations. Further, the university can implement dialogues on faculty concerns especially in relation to promotion and evaluation procedures, securing research funds, and dealing with committee work. The feedback will be invaluable in crafting university policies and programs on faculty welfare.

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## References

- Akbar, A., & Akhter, W. (2011). Faculty Stress at Higher Education: A Study on the Business Schools of Pakistan. *World Academy of Science, Engineering and Technology*, 73, 1089–1093. DOI: 10.5281/zenodo.1085294
- Akbar, A., & Naseem, M. A. (2012). Sources of Stress in Academe: A Study on the Universities of Punjab. *Elixir Human Res. Mgmt.*, 52, 11571–11577. 1681112570\_201211074.pdf (elixirpublishers.com)
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How Learning Works: Seven Research-Based Principles for Smart Teaching*. John Wiley and Sons.
- Betonio, J. R. (2015). Stress Factors and the Teaching Performance of the College Faculty. *International Journal of Social Science and Humanity*, 5(7), 651–655. <https://doi.org/10.7763/IJSSH.2015.V5.534>
- Bongalonta, M. B. (2022). Job Satisfaction of Faculty Members of State Universities and Colleges (SUCs) in Bicol, Philippines. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(5), 935–947. <https://doi.org/10.11594/ijmaber.03.05.19>
- Chamundeswari, S. (2013). Job Satisfaction and Performance of School Teachers . *International Journal of Academic Research in Business and Social Sciences* , 3(5), 420–428. <http://hrmars.com/admin/pics/1859.pdf>
- Chung, C. E., & Kowalski, S. (2012). Job Stress, Mentoring, Psychological Empowerment, and Job Satisfaction Among Nursing Faculty. *Journal of Nursing Education*, 51(7), 381–388. <https://doi.org/10.3928/01484834-20120509-03>
- Colacion-Quiros, H., & Gemora, R. B. (2016). Causes and Effects of Stress Among Faculty Members in a State University . *Asia Pacific Journal of Multidisciplinary Research*, 4(1), 18–27. APJMR-2016.4.1.04.pdf
- De Guzman, R. S., & Depositario, D. P. (2019). An Assessment of the Level of Job Satisfaction Among Faculty Members in a Philippine University. *Journal of Economics, Management and Agricultural Development*, 5(2), 55–68. <https://ssrn.com/abstract=3768905>
- Gartia, R., & Sharma, S. (2013). Stress Among Teacher Educators from Self-financing Colleges of Education. *International Journal of Research Pedagogy and Technology in Education TION AND MOVEMENT SCIENCES (IJEMS)*, 1(3), 221–232. <https://ijems.net/index.php/ijem/article/download/39/39>

- Gmelch, W. H. (1993). *Coping with Faculty Stress* (Vol. 5). Sage Publications, Inc.
- Gmelch, W. H., Wilke, P. K., & Lovrich, N. P. (1986). Dimensions of Stress among University Faculty: Factor-analytic Results from a National Study. *Research in Higher Education*, 24(3), 266–286. <https://doi.org/10.1007/BF00992075>
- Gupta, V., Rao, E., & Mukherjee, R. (2015). Occupational Stress Amongst Faculty Members: A Review of Literature. *International Journal of Research and Development - A Management Review*, 4(2), 18–27. (PDF) Occupational Stress Amongst Faculty Members: A Review of Literature (researchgate.net)
- Hardré, P., & Cox, M. (2009). Evaluating Faculty Work: Expectations and Standards of Faculty Performance in Research Universities. *Research Papers in Education*, 24(4), 383–419. <https://doi.org/10.1080/02671520802348590>
- Ho, C.-L., & Au, W.-T. (2006). Teaching Satisfaction Scale. *Educational and Psychological Measurement*, 66(1), 172–185. <https://doi.org/10.1177/0013164405278573>
- Hoboubi, N., Choobineh, A., Kamari Ghanavati, F., Keshavarzi, S., & Akbar Hosseini, A. (2017). The Impact of Job Stress and Job Satisfaction on Workforce Productivity in an Iranian Petrochemical Industry. *Safety and Health at Work*, 8(1), 67–71. <https://doi.org/10.1016/j.shaw.2016.07.002>
- Iqbal, A., & Kokash, H. (2011). Faculty Perception of Stress and Coping Strategies in a Saudi Private University: An Exploratory Study. *International Education Studies*, 4(3). <https://doi.org/10.5539/ies.v4n3p137>
- Jing, L. (2008). Faculty's Job Stress and Performance in the Undergraduate Education Assessment in China: a Mixed-Methods Study. *Educational Research and Review*, 3(9), 294–300. <https://doi.org/https://doi.org/10.5897/ERR.9000164>
- Loquias, M. M., & Sana, E. A. (2013). Job Satisfaction among Faculty Members in the Colleges of Pharmacy in Metro Manila, Philippines. *International Journal of Pharmacy Teaching & Practices*, 4(4), 787–792. (PDF) Job Satisfaction among Faculty Members in the Colleges of Pharmacy in Metro Manila, Philippines (researchgate.net)
- Lukan, J., Bolliger, L., Pauwels, N. S., Luštrek, M., Bacquer, D. De, & Clays, E. (2022). Work Environment Risk Factors Causing Day-to-day Stress in Occupational Settings: A Systematic Review. *BMC Public Health*, 22(1), 240. <https://doi.org/10.1186/s12889-021-12354-8>
- Mendoza, J. B. (2024). Echoes of Contentment: Understanding Job Satisfaction and Work Productivity among College Faculty. *International Journal of Multidisciplinary Research and Publications*, 6(12), 181–186. (PDF) Echoes of Contentment: Understanding Job Satisfaction and Work Productivity among College Faculty (researchgate.net)
- Meng, Q., & Wang, G. (2018). A Research on Sources of University Faculty Occupational Stress: A Chinese Case Study. *Psychology Research and Behavior Management*, Volume 11, 597–605. <https://doi.org/10.2147/PRBM.S187295>
- Merchant, Z. A., & Shastri, S. (2013). Exploring Job Satisfaction, Stress and Coping Strategies Employed by Engineering Faculty. *International Journal of Science and Research*, 2(10), 72–77. MDIxMDEzMDQ=.pdf (ijsr.net)
- Muchinsky, P. (2007). *Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology* (8th ed.). Thomson/Wadsworth.
- Oktaviani, R., & Sopiah, S. (2022). Systematic Literature Review of Job Satisfaction: An Overview and Bibliometric Analysis. *JURNAL EKONOMI KREATIF DAN MANAJEMEN BISNIS DIGITAL*, 1(2), 185–203. <https://doi.org/10.55047/jekombital.v1i2.314>

- Parveen, M. (2013). Faculty Stress in a Saudi Government University. *International Journal of Humanities and Social Science*, 3(18), 180–192. 19.pdf (ijhssnet.com)
- Patimo, D. (2020). Faculty Performance Evaluation System of State Universities and Colleges in the Philippine Eastern Visayas Region. *JISAE: Journal of Indonesian Student Assessment and Evaluation*, 6(2), 159–167. <https://doi.org/10.21009/JISAE.062.06>
- Pearson, L. C., & Moomaw, W. (2005). The Relationship between Teacher Autonomy and Stress, Work Satisfaction, Empowerment, and Professionalism. *Educational Research Quarterly*, 29(1), 38–54. The Relationship between Teacher Autonomy and Stress, Work Satisfaction, Empowerment, and Professionalism | Semantic Scholar
- Rafeeq, M., & Harish, P. (2015). Work Life Balance (WLB) Is Life-Work Balance (LWB) An Innovative Approach on Teaching Faculties in Private Rural Higher Educational institutions. *IOSR Journal of Business and Management*, 17(4), 22–30. D017442230.pdf (iosrjournals.org)
- Reevy, G. M., & Deason, G. (2014). Predictors of Depression, Stress, and Anxiety among Non-tenure Track Faculty. *Frontiers in Psychology*, 5. <https://doi.org/10.3389/fpsyg.2014.00701>
- Siegrist, J. (2017). The Effort–Reward Imbalance Model. In *The Handbook of Stress and Health* (pp. 24–35). Wiley. <https://doi.org/10.1002/9781118993811.ch2>
- Tan, J. S. T. (2017). Factors Affecting Stress among Faculty Members of Public Universities in the Philippines: A Multiple Regression Analysis. *International Journal of Psychological Studies*, 9(3), 64. <https://doi.org/10.5539/ijps.v9n3p64>
- UP Diliman. (2003). *UP Diliman Faculty Manual*.
- UPLB. (2002). *TEACHER'S GUIDE TO ACADEMIC POLICIES AND PROCEDURES*.
- Wallingford, V., Konyu-Fogel, G., & Dubois, M. (2014). Performance Evaluation and Promotion Criteria: Perceptions of Faculty Evaluation in Promotion Decisions. *Journal of the North American Management Society*, 8(1). <https://thekeep.eiu.edu/jnams/vol8/iss1/7>
- WHO. (2024). *Mental Health at Work*. (Mental health at work)
- Wiggins, K. (2015). Teaching is Among the 'Top Three Most Stressed Occupations.' *TES Magazine*. Teaching is among the 'top three most stressed occupations' | Tes Magazine