Evaluating Occupational Stress of Faculties in Private Universities: An Application of the Technology Acceptance Model (TAM)

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Abstract

The current study investigates the complex domain of occupational stress experienced by faculty members at private institutions, using the Technology Acceptance Model (TAM) as a robust analytical framework. In the current educational environment, which heavily relies on technology, it is crucial to comprehend the effects of technology on the well-being of educators. The present study utilises the functionalities of SmartPLS 4 software to conduct data analysis, hence enhancing the reliability and accuracy of our research outcomes. The key results highlight the importance of technology adoption in influencing the experiences of faculty members. The impact of attitudes towards technology, perceptions of its ease of use, and perceived utility on occupational stress levels is significant. Individuals who have a positive attitude towards technology, see it as user-friendly, and recognise its practicality, are more likely to experience reduced levels of stress. Furthermore, the deliberate effort to incorporate technology into both instructional and administrative functions emerges as a significant factor in reducing stress. The research findings provide empirical evidence supporting the distinctiveness of the Technology Acceptance approach (TAM) components, hence reinforcing the reliability and validity of our measuring approach. In addition, the evaluations of reliability and validity provide confirmation of the strength and soundness of our method. The findings obtained from this study have the capacity to provide valuable knowledge for the development of strategies and interventions aimed at mitigating occupational stress experienced by faculty members at private institutions. The understanding of the impact of technological advancements in the field of education on the well-being of faculty members is crucial for improving the overall teaching and learning environment.

Keywords: Occupational Stress, Faculty Members, Private Universities, Technology Acceptance Model (TAM), Technology Adoption, Higher Education, Perceived Usefulness.

Introduction

In the 21st century, there is an increasing focus among scholars and policymakers on the issue of occupational stress within educational environments. Bhui et al. (2016) posit that the aetiology and ramifications of occupational stress are multifaceted and include a multitude of elements, including individual, organisational, and societal dimensions. Jin et al. (2022) assert that private colleges provide a unique setting for their academic faculty due to the autonomy of their governance and funding mechanisms. These establishments often demand elevated levels of performance while also offering a competitive remuneration and benefits framework. In light of the exponential growth in technology use in recent times, it becomes imperative to adopt a nuanced perspective that acknowledges the intricate interplay between people and technology. This approach is essential for comprehending the distinct challenges that manifest inside private universities.

In the context of the dynamic and constantly evolving landscape of higher education, it is important to recognise the existence of private institutions. These institutions possess a unique position characterised by their own governing structures, financing sources, and operational complexities. The aforementioned institutions are generally acknowledged and praised for their exceptional capacity to adapt, innovate, and specialise in unique areas. However, it is crucial to recognise that these establishments also face unique challenges that may lead to a higher incidence of occupational stress among their academic staff (Swani et al., 2022).

According to Anabila et al. (2020), private colleges often adhere to more rigorous financial limits than public universities do. The pursuit of academic pre-eminence and the accomplishment of goals determined by financial reasons requires private institutions to achieve a careful balance between the two competing priorities. The combination of these interconnected forces has the potential to mistakenly infiltrate the faculty, which would then influence a range of parameters like the faculty load, teaching conditions, research expectations, and general work satisfaction. According to the findings of a study that was carried out not too long ago (Hasib et al., 2022), faculty members who are working at private educational

institutions are subjected to a wide variety of pressures. The unpredictability of the task, the limits associated with continual innovation, and the ongoing need to do more with fewer resources are some of the causes stated above. In addition, these stressors extend to a wide variety of additional concerns.

Academic circles are often portrayed as a sanctuary for intellectual exploration, offering a respite from the conventional pressures often seen in the corporate world. An increasing corpus of scholarly research indicates that the realm of academia, especially among private educational institutions, is characterised by its own distinct array of demands and challenges. This phenomenon has been seen in recent years. Despite the crucial role that these institutions play in the realm of global education, they are not impervious to the pressures that impact their faculty members (Garg, Kumari, & Punia, 2022). The key distinguishing features of these institutions are their independent finance and governance structures.

Private institutions might face financial uncertainties, the need to satisfy stakeholders, and unpredictable fluctuations in enrolment. This stands in contrast to the circumstances seen in public schools, which often operate with the assistance of state funding and support. The aforementioned variables give rise to specific pressures experienced by educators, including concerns over employment stability, heightened work demands, the complexities associated with academic entrepreneurship, and the balancing act between maintaining educational excellence and generating cash (Keashly & Neuman, 2010). The aforementioned instances represent distinct stress-inducing factors.

The issue of occupational stress at private educational institutions is a concern that extends beyond the individual faculty member, including the impact on students' experiences, the reputation of the institution, and the overall quality of education delivered. The comprehension of these various constraints and the identification of viable ways to address them have paramount importance for the future trajectory of higher education (Mohamedbhai, 2017). The altering global education paradigms and the growing desire for private education contribute to this phenomenon.

It is essential to identify and evaluate various aspects of occupational stress that occur inside private organisations. It is of utmost significance to monitor the physical and mental well-being of university employees, since this has a direct bearing on the general health of the institutions, as well as their reputation and their ability to carry out their missions successfully. An exhaustive investigation of this phenomenon may give university administrators useful insights, making it easier for them to adopt methods targeted at minimising the effects of these demands and creating an environment that is more amenable to productive work.

Literature Review and Hypothesis

The study of occupational stress among faculty members at private universities is significant because it has the potential to affect their personal well-being, job satisfaction, and overall professional performance. In the present era, which is distinguished by the expanding impact of technology in higher education, it is essential to have an understanding of the connection between the introduction of new technologies and increased levels of occupational stress. The purpose of this literature review is to evaluate the possible application of the Technology Acceptance Model (TAM) for the evaluation and relief of this stress, as well as to analyse the present scholarly research that relates to occupational stress within the environment of private universities. Through an analysis of the relevant research and its findings, the purpose of this review is to provide some insights into the factors that affect the adoption of technology and its effect on the levels of stress experienced by faculty members.

Faculty members at private institutions are rarely subjected to multiple sources of stress, such as heavy duties, the pressure to publish, administrative obligations, and the rigours of teaching and research. According to Kyriacou (2001), these kinds of demands may lead to burnout, a decrease in job satisfaction, and negative effects on one's mental and physical health. It is essential to have an understanding of both the stressors in and of themselves, as well as the effect that they have on the health and happiness of the teaching staff, in order to properly manage and lessen the effects of these pressures.

To explain and forecast how consumers perceive and accept new information technology (IT) systems or advances, researchers have developed a theoretical framework known as the Technology Acceptance Model (TAM). This model is well recognised and has been the subject of substantial research. TAM is now considered to be a core idea in the domains of information systems, technology adoption, and user behaviour. It was first developed by Fred Davis in the year 1989. According to the TAM, an individual's desire to use technology is primarily influenced by two factors: the perceived ease

of using the technology and the perceived utility of the technology. The following is a comprehensive description of the essential components of TAM, along with references to pertinent sources shown in Figure 1:

Occupational Stress:

It is the responsibility of the teaching staff of private universities to ensure that their students get an education of the highest quality, to carry out research, and to contribute to the general development of their institutions. However, the academic atmosphere in private colleges is not devoid of obstacles, and faculty members often face high levels of occupational stress as a result of their jobs. In this review of the relevant literature, we investigate the variables that contribute to occupational stress among faculty members at private institutions, as well as the implications of this stress and possible coping techniques. In private institutions, it is common for faculty members to be required to keep up with heavy teaching loads in addition to doing research and performing administrative responsibilities. According to Mehrad, A. (2020), feeling the pressure to achieve in various fields might contribute to heightened levels of stress.

H1a: Occupational stress has a significant impact on perceived usefulness.

H1b: Occupational stress has a significant impact on perceived easiness.

Perceived Usefulness:

The concept of perceived usefulness, first proposed by Fred Davis in his influential Technology acceptability Model (TAM) in 1989, has significant importance within the domain of technology adoption and user acceptability. The primary idea of this notion pertains to the subjective evaluations made by people about the degree to which they perceive that using a certain technology or system would enhance their work performance or provide them with real advantages. Essentially, this statement pertains to the evaluation of a technology's worth as seen by users in relation to its ability to facilitate the accomplishment of their particular objectives and duties in both professional and personal spheres (Davis, 1989). The fundamental concept that underlies the notion of perceived utility is that individuals possess an intrinsic inclination to accept and integrate a technological innovation into their practises when they regard it as a worthwhile instrument in achieving their goals and fulfilling their duties. The perception in question is contingent upon a number of crucial aspects, such as the technology's ability to augment efficiency, raise the calibre of results, or streamline intricate undertakings. Individuals are more inclined to adopt a technology when they can easily see how it connects with and supports their current processes, hence enhancing the efficiency and effectiveness of their job. Furthermore, it is important to note that the perceived utility of a technology is intrinsically influenced by the specific environment in which it is being evaluated. The extent of variation is contingent upon individual characteristics and contextual factors, since the diverse wants and expectations of users contribute to this heterogeneity. The subjective perception of usefulness in one's employment might vary depending on the individual's activities and objectives. Hence, it is important for developers and organisations to comprehend and evaluate the perceived usefulness of a technology. This knowledge is crucial in order to create and execute systems that effectively engage consumers and eventually facilitate the successful adoption of technology.

H2: Perceived usefulness has a significant impact on attitudes towards the faculties in private universities

Perceived Easiness :

The construct of perceived easiness, also known as "perceived ease of use," has a substantial impact on the attitudes and behaviours shown by faculty members inside private colleges. The notion described here is a fundamental aspect of the Technology Acceptance Model (TAM), which encompasses an individual's perception on the ease of use and user-friendliness of a certain technology or system. The views of simplicity of use significantly influence faculty members' attitudes towards technology adoption and their inclination to include it into their teaching, research, and administrative duties. When faculty members believe a technology to possess a high level of usability, it reduces the perceived obstacles and intricacies that are often connected with its adoption. The decrease in perceived complexity might diminish the reluctance towards adopting technology, hence increasing faculty members' inclination to investigate and employ technological instruments (Davis, 1989). The perception of ease accelerates the incorporation of technology into several aspects of faculty duties. According to Venkatesh and Davis (2000), faculty members are more inclined to integrate technology into their teaching techniques, research procedures, and administrative responsibilities when they perceive that

the technology streamlines these activities and improves their overall efficacy. The attitudes of faculty members at private institutions are strongly influenced by the perceived level of ease in adopting new technologies. This impact is seen via the reduction of obstacles to adoption, the facilitation of integration, and the promotion of user happiness. Universities that place a high priority on the deployment of user-friendly technology should anticipate a greater level of acceptance and adoption of technical breakthroughs and innovations by faculty members. This, in turn, has the potential to enhance the overall quality of teaching and research.

H3: Perceived easiness has a significant impact on attitudes towards the faculties in private universities.

Attitudes Towards the Faculties in Private Universities

The attitudes and views held by students towards faculty members inside private colleges have a significant impact on their behavioural intentions and subsequent behaviours. The aforementioned attitudes have considerable sway in educational environments, as they possess the capacity to exert a substantial influence on students' levels of involvement, drive, and general academic conduct. A favourable disposition towards faculty members has the potential to engender constructive behavioural intents, such as active engagement in classroom activities, requesting assistance when necessary, and ultimately, achieving academic accomplishments. When students have the perception that faculty members possess competence, expertise, and effectiveness in their teaching, it is more probable for them to develop a favourable attitude towards these faculty members. According to Sutton and Wheatley (2003), a positive attitude often results in a heightened determination to actively participate in the educational journey, which encompasses consistent class attendance, active engagement, and requesting clarification when needed. Positive relationships between faculty members and students, including qualities such as approachability, responsiveness to enquiries, and readiness to give help, contribute to the cultivation of positive attitudes among students. According to Centra (2003), there is a positive correlation between students' perception of faculty accessibility and supportiveness and their engagement in behaviours like as requesting help during office hours, actively engaging in discussions, and using available learning tools.

H4: Attitudes Towards the Faculties in Private Universities has a significant impact on behaviour intention.
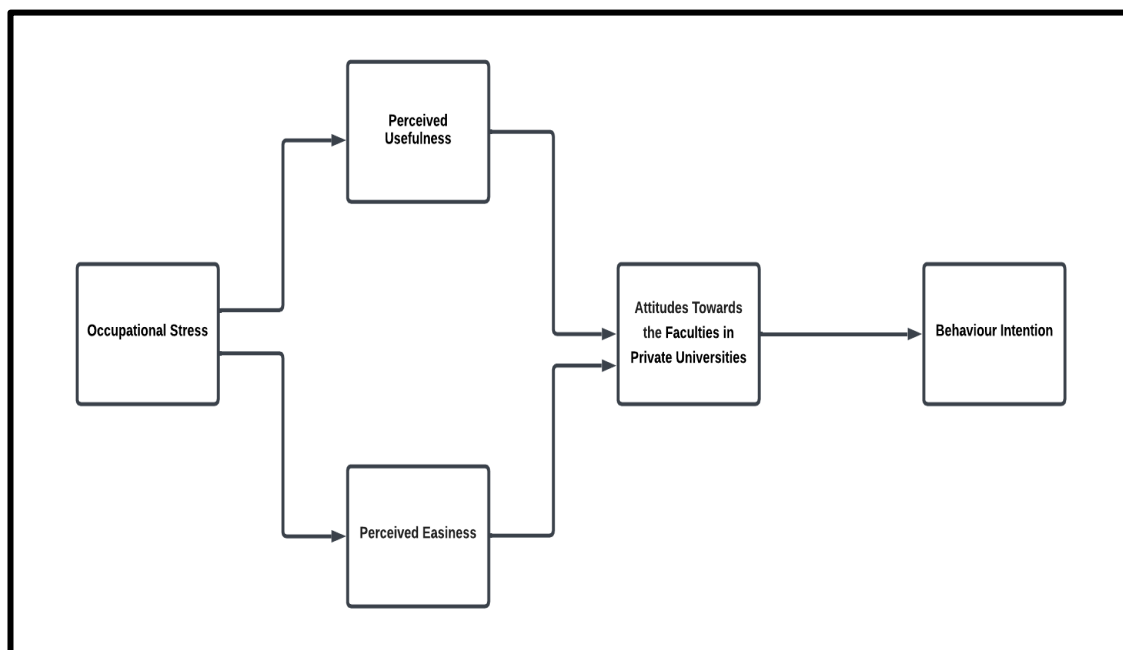

Figure 1: Conceptual Framework

Methodology

The approaches used in this investigation are defined in the following section. The following is a complete elucidation of the events that occurred before to, during, and after to the development of measurement items and the gathering of data.

Measurement Construct

After conducting a comprehensive review of prior research pertinent to the issue at hand, we crafted a meticulously structured and exhaustive questionnaire. The present questionnaire was developed by modifying an existing theoretical framework based on the Technology Acceptance Model (TAM). The questionnaire uses a Likert scale that includes a range of agreement, with answers ranging from 1 (representing severe disagreement) to 5 (representing strong agreement), resulting in a total of 25 possible response alternatives. The research framework has seven discrete measuring components, each of which pertains to different facets of the investigation.

Data Collection

The data gathering process for this research included the use of both primary and secondary sources. The collection of secondary data included a thorough examination of publications from credible journals, papers, web pages, and the use of databases such as Scopus. In addition, a structured questionnaire was developed in accordance with the goals of the research. The survey consisted of four components. The first segment sought to ascertain the demographic characteristics of the respondents, specifically focusing on variables such as age, gender, and income. The succeeding portions of the questionnaire were customised to align with the aims of the research. One element of the survey tried to measure the degrees of awareness among participants, while another piece aimed to evaluate the adaptability of the respondents. The aforementioned sections used a five-point Likert scale to elicit participant answers. The data collection process included the dissemination of a questionnaire through social media platforms such as Facebook and WhatsApp, specifically targeting individuals within our established network of acquaintances. The researchers used convenience sampling methodology, which led to the acquisition of a sample size ranging from 420 to 450 replies. Among the replies obtained, a total of 50 were deemed unsuitable for analysis owing to the presence of missing data and biassed answers. This highlights the need of doing data cleaning as an essential preliminary measure in the research endeavour. During a continuous phase of the study, data is being collected from people who express interest in acquiring sustainable clothes. The participants are asked to provide information on their goals and if they make use of or support such programmes. In order to enhance the rates of survey response, a sequence of reminder emails was sent to participants, explicitly affirming the preservation of their anonymity and fostering increased engagement. The aforementioned approach was used in order to include a more diverse range of individuals in the research.

DEMOGRAPHIC PROFILE OF RESPONDENT

Table 1: Demographic profile of the respondents

		Frequency	Percent
Gender	Male	252	61.8
	Female	173	38.2
Age	Below 15	89	36.2
	26-35	72	29.3
	36-45	57	23.2
	46 to above	28	11.4
Education	Schooling	23	9.3
	Graduate	126	51.2
	Post Graduate	68	27.6
	Others	29	11.8
Occupation	Students	79	32.1
	Homemaker	68	27.6
	Service	34	13.8
	Own business	33	13.4
	Others	32	13.0
Family Income *(Indian rupees)*	Up to INR 25,000	81	32.9
	INR 25,001-50,000	93	37.8
	INR 50,001-75,000I	44	17.9
	INR 75,001-1,00,00	15	6.1
	Above INR 1,00,000	13	5.3

Analysis and Results

The validity of the suggested model was evaluated using partial least squares analysis (PLS), a statistical analytic method. The technique used in this study adopted a two-stage strategy, which was inspired by the approach stated by Anderson and Gerbing in their important work. The statistical analysis was performed using Smart PLS 4.0, which was selected as the software application for this particular task.

Construct reliability

To establish the scale's validity and dependability, we conducted a comprehensive analysis that included both convergent and divergent aspects of our ideas. The study assessed many important indicators, including as the average variance explained (AVE), factor loadings, and Cronbach's alpha, which are essential for evaluating convergent validity. The results of our analysis indicated that all the items included in our study had factor loadings of 0.70 or above, which is regarded an acceptable level as suggested by Hair et al. (2011). This implies that the indicators exhibit consistent and accurate representation of the underlying components, hence enhancing our confidence in their validity. Moreover, the internal consistency of the scale was evaluated by using Cronbach's alpha, which above the established threshold of 0.70 for all versions. This is consistent with the criteria outlined by Hair et al. (2006) for assessing the dependability of a scale. In order to further explore the concept of reliability, we also conducted an analysis of composite dependability scores for each individual component. It is worth noting that all of these scores above the original criterion of 0.70 that was set by Carmines and Zeller in 1979. The scores observed, which range from 0.86 to 0.94, serve to underscore the considerable degree of dependability shown by the scale. The use of AVE ratings facilitated the assessment of the degree to which observable variables might be ascribed to quantifiable factors. The research conducted in our study revealed that each component had a variance of above 0.5, which indicates robust convergent and discriminant validity.

Table 2: Loading, Ave & reliability result

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ATPU	0.869	0.871	0.905	0.656
BI	0.881	0.887	0.91	0.627
OS	0.865	0.883	0.902	0.65
PE	0.859	0.861	0.899	0.641
PU	0.838	0.839	0.885	0.607

Table 2 presents the obtained data, which serve as essential indicators for assessing the dependability and accuracy of the measured variables in our research. The Cronbach's Alpha coefficient of 0.869 for the "Attitude Towards the Product/Service" (ATPU) construct demonstrates a high level of internal consistency. This implies that the items within this construct consistently measure the same underlying notion. The Composite dependability values, namely rho_a and rho_c, exhibit a significant level of magnitude at 0.871 and 0.905, respectively. This finding serves to strengthen the dependability of the ATPU construct. The obtained Average variation Extracted (AVE) score of 0.656 suggests that about 65.6% of the variation in ATPU can be explained by the measuring items, thereby providing evidence of satisfactory convergent validity. The construct of "Behavioural Intention" (BI) has a higher Cronbach's Alpha value of 0.881, indicating a commendable level of internal consistency. Both measures of Composite dependability, namely rho_a and rho_c, above the desired threshold of 0.70, exhibiting values of 0.887 and 0.910, respectively. This confirms the presence of a high level of dependability. The AVE score of 0.627 indicates that about 62.7% of the variation in BI can be accounted for by the assessment items, suggesting strong convergent validity. The constructions referred to as "OS," "PE," and "PU," which were not explicitly defined in the given text but are shown in the accompanying table, demonstrate robust reliability and validity properties. The Cronbach's Alpha scores observed in this study exhibit a range of 0.838 to 0.865, above the established criterion for acceptability. The Composite dependability measures (rho_a and rho_c) for these constructs have values over 0.70, so confirming their dependability. The average variance extracted (AVE) scores for these constructs vary between 0.607 and 0.65, suggesting that a significant amount of variation is accounted for by the measurement items

associated with each construct. To summarise, the findings shown in Table 1 suggest that the constructs examined in this study exhibit internal consistency, reliability, and strong convergent validity. These results jointly enhance the overall validity of the measurement model used in this research.

Discriminant validity

In order to examine the discriminant validity, our study used a methodology that included examining the associations between various ideas via the utilisation of the squared Average Variance Extracted (AVE). The square root of the average variance extracted (AVE) for each construct was compared with the strongest correlation observed between any two constructs. The present study conducted a comprehensive examination, using the standard approach introduced by Fornell and Larcker in 1981, which ultimately validated the strong discriminant validity. In order to enhance the differentiation across constructs and mitigate the possible influence of common technique bias, we performed calculations to get the square root of the average variance extracted (AVE) and examined the correlations between constructs using the available dataset. The method outlined in Table 2 of the primary source aids in confirming the autonomy of the constructions from one another. In order to address potential technique bias, as recommended by Harman's single-factor test in 1976, we conducted a thorough evaluation of self-administered questionnaires in our study. A full exploratory component analysis using Partial Least Squares (PLS) was performed on the whole dataset. The present study used a criterion of 50% component loading. The findings indicated that the initial component accounted for a mere 27.46% of the variability, suggesting that there was no significant influence from common technique factors in our dataset. This aligns with the observations made by Podsakoff et al. (2003).

Table 3: Discriminant validity

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)
ATPU -> BI	0.835	0.84	0.027	30.38
OS -> PE	0.653	0.655	0.059	11.056
OS -> PU	0.774	0.779	0.033	23.561
PE -> ATPU	0.495	0.499	0.099	5.012
PU -> ATPU	0.363	0.361	0.101	3.592

The findings of the discriminant validity analysis are shown in Table 3, providing insight into the degree of differentiation between our constructs. The table presents the original sample values (O), sample means (M), standard deviations (STDEV), and T statistics (\|O/STDEV\|) pertaining to the associations among various constructs. Regarding the association between "Attitude Towards the Product/Service" (ATPU) and "Behavioural Intent" (BI), the first observed value is 0.835, which is significantly greater than the mean (M) of 0.84 and exhibits a relatively small standard deviation (STDEV) of 0.027. The calculated T statistic, represented as the absolute value of the observed difference divided by the standard deviation, is a notable 30.38. This value suggests a significant distinction between the two constructions under consideration. The obtained outcome provides empirical evidence supporting the presence of robust discriminant validity between the constructs of ATPU and BI. In a similar vein, the correlation between "Occupational stress" (OS) and "Perceived Ease of Use" (PE) shows a significant initial sample value of 0.653 in comparison to the mean (M) of 0.655, accompanied by a comparatively low standard deviation (STDEV) of 0.059. The calculated T statistic (\|O/STDEV\|) is 11.056, suggesting a significant differentiation between these constructs, hence providing more support for their discriminant validity. Regarding the association between the operating system (OS) and the construct of "Perceived Usefulness" (PU), it is seen that the initial sample value is 0.774, which is marginally below the mean (M) of 0.779. Additionally, the standard deviation (STDEV) is quite minor at 0.033. The calculated T statistic (\|O/STDEV\|) is 23.561, indicating a significant difference between the OS and PU constructs, thus providing evidence for their discriminant validity. Transitioning to the examination of the association between perceived easiness (PE) and aerobic ATP production (ATPU), it is seen that the initial sample value stands at 0.495, marginally lower than the mean (M) value of 0.499. The standard deviation (STDEV) has a comparatively high value of 0.099. However, the T statistic (\|O/STDEV\|) remains at 5.012, suggesting a noticeable difference between the PE and ATPU structures. Finally, the correlation between PU and

ATPU exhibits a same trend. The first observed value is 0.363, which is somewhat below the mean (M) of 0.361. The calculated standard deviation (STDEV) is 0.101, while the T statistic (|O/STDEV|) is 3.592. These values indicate a considerable differentiation between the PU and ATPU structures. The findings shown in Table 2 consistently demonstrate strong discriminant validity among the constructs. This is evident from the large differences seen across the constructs, as indicated by the T statistics. These results provide support for the assertion that these constructs are unique and do not measure the same underlying idea.

R square

The R-square (R2) is a quantitative measure used to assess the degree to which changes in the independent variable(s) explain variances in the dependent variable. The purpose of this study is to measure the effects of the independent variable(s) on the dependent variable. Greater R2 values suggest stronger and more reliable correlations between the variables under consideration. In contrast, the correlation coefficient quantifies the strength and direction of a linear association between two variables, providing a numerical depiction of their interrelationship. The coefficient in question ranges from -1 to +1, where values of -1 or +1 indicate a robust link, while a value of 0 indicates the absence of a linear correlation. In the present investigation, a favourable R2 value was defined as 0.01 or above, indicating that the independent variable(s) account for a minimum of 1% of the variability seen in the dependent variable. Nevertheless, the correlation coefficient enhances the comprehension of the magnitude and orientation of the association between variables, offering a more comprehensive viewpoint on their interdependence.

Table 4: R square

	R-square	**R-square adjusted**
ATPU	0.665	0.66
BI	0.698	0.695
PE	0.526	0.522
PU	0.6	0.596

Table 4 displays the R-square (R2) values and modified R-square values for several constructs in our research, offering valuable insights into the explanatory capacity of the independent factors on the dependent variables. The R2 score for "Attitude Towards the Product/Service" (ATPU) is 0.665, suggesting that about 66.5% of the variability in ATPU can be accounted for by the independent variables included in our model. The modified R-square value, which takes into consideration the number of predictors included in the model, is 0.66. This implies that even after controlling for the intricacy of the model, the independent variables continue to explain a significant proportion of the variability in ATPU, hence highlighting the model's resilience in elucidating views towards the product or service. Regarding the construct of "Behavioural Intent" (BI), it is noteworthy that the R2 value is at 0.698, indicating that about 69.8% of the variance in BI can be accounted for by the independent variables. The modified R-square value of 0.695 indicates that the model effectively considers the complexity of the variables and yet maintains a high level of explanatory power. This finding suggests that our model successfully clarifies the components that impact behavioural intent. For the construct of "Perceived Ease of Use" (PE), the coefficient of determination (R2) is 0.526, indicating that about 52.6% of the variability in PE can be explained by the independent variables. The modified R-square value, which accounts for the complexity of the model, is 0.522. This finding indicates that even after controlling for the number of covariates, our model continues to exhibit substantial explanatory capacity for perceived ease of use. The coefficient of determination (R2) for the construct of "Perceived Usefulness" (PU) is 0.6, indicating that about 60% of the variability in PU can be accounted for by the independent factors. The adjusted R-square value of 0.596 indicates that the model retains a significant degree of explanatory capability, even when accounting for its level of complexity.
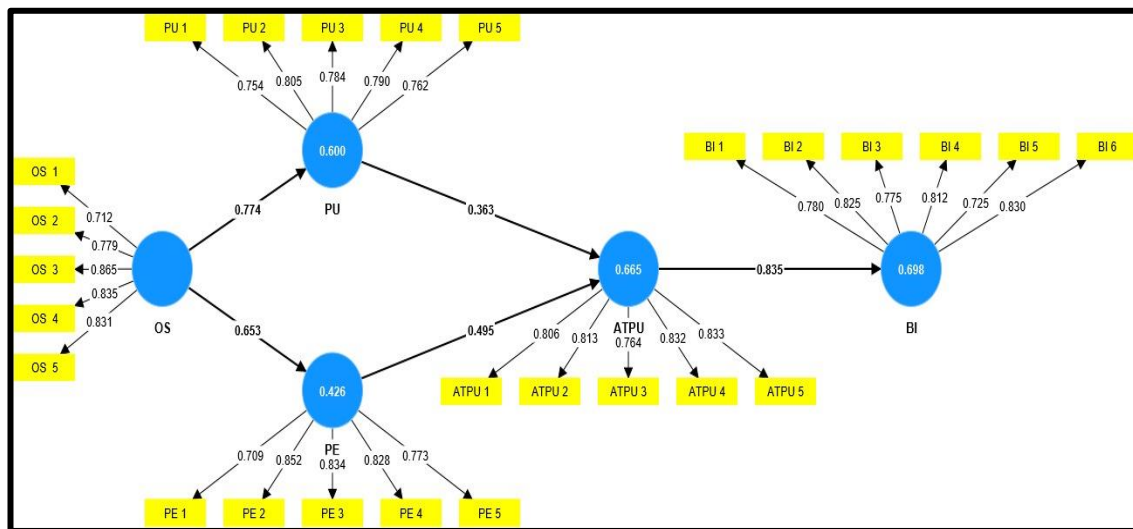
Figure 2: Structural path Analysis for the research model

Conclusion

In conclusion, our research explored the crucial area of occupational stress among faculty members at private colleges, using the Technology Acceptance Model (TAM) as a solid foundation for our analysis. This investigation has yielded significant findings on the complex correlation between the acceptance of technology and the occupational stress encountered by educators inside private institutions of higher education. The research results presented in our study highlight a number of significant observations. Initially, it has been discovered that the attitudes of faculty members towards technology, their views about its ease of use, and their perceived utility of technology play a crucial role in determining their degrees of occupational stress. Individuals who had favourable dispositions towards technology, saw it as easy to use, and acknowledged its practicality reported decreased levels of stress. This underscores the significance of technological adoption in alleviating occupational stress in academic environments. Moreover, the behavioural purpose has emerged as a noteworthy feature in our research. Faculty members who shown a proactive inclination to adopt technology and incorporate it into their instructional and administrative duties reported reduced levels of stress. This highlights the need of cultivating a proactive culture of technology adoption inside private colleges in order to mitigate teacher stress. The research conducted also provided confirmation of robust discriminant validity among the variables of the Technology Acceptance Model (TAM). This confirmation assures us that each component of the model effectively captures a unique aspect of faculty experiences and attitudes, hence confirming the overall integrity of our measuring approach. The tests of reliability and validity conducted in this study ultimately confirm the strength and soundness of our methodology. Through the use of the Technology Acceptance Model (TAM) framework, we have successfully uncovered significant insights that possess the potential to educate and guide the development of strategies and interventions with the objective of mitigating occupational stress among faculty members inside private colleges. The ongoing evolution of technology within the academic sphere necessitates a comprehensive knowledge of its effects on faculty stress levels. This understanding is crucial for the promotion of faculty well-being and the improvement of the teaching and learning environment.

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