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# Impact of Stress, Psychological Distress and Organizational Commitment on Business Education Teacher's Productivity

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## ABSTRACT

**Aim:** The changing technology, economic conditions and global competition have made the role of management education crucial for the success of individuals and the industry. The business educators are increasingly concerned with preparing the students for the competitive market. Stress negatively affects the varied efforts of business educators to produce talented workforce. The main objective of the study was to explore the effects of stress and psychological distress on the productivity of business teachers. **Methods:** A deductive approach was adopted for framing the hypotheses and a structured questionnaire was used for collecting data. The research participants were business educators (n=408) working in Karnataka, India. SPSS AMOS was adopted to fit a structure equation model on the data collected and study the structural relationships among the variables. **Results:** The findings revealed that the stress and psychological distress experienced by business educators significantly and negatively affected their productivity (teaching productivity, research productivity and student outcomes). However, the organizational commitment of the teachers enhanced their productivity. **Implications:** Based on the results, it is implied that business education administrators must take efforts and develop strategies to help business teachers cope with stress in order to achieve academic outcomes.

***KEYWORD:*** *Stress, Psychological distress, Commitment, Teaching productivity, Research productivity, Student outcomes*

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## INTRODUCTION

Productivity is a measure of comparative performance between the results produced and the resources utilized for the same (Utami, Matin, & Sutjipto 2018). The productivity of teachers has garnered increased attention due to its significance in the advancement of knowledge through education (Kagwiria & Amukowa, 2013; Emunemu & Isuku, 2012).Being one of the most powerful predictors of student outcomes (Blazar, 2016; Good, 2014; Kaplan & Owings, 2004), the success of an educational system depends largely on the caliber and productivity of its teachers (Obiechina, Abraham & Nwogu, 2018). It acts as a supporting framework to ensure that the investment made in education produces desirable results. The productivity of teachers can however be depressed by the stress experienced by them in the profession (Rizvi & Mangal, 2018).

Stress, on the other hand, can be defined as a process of "behavioral, emotional, mental, and physical reactions caused by prolonged, increasing, or new pressures that are significantly greater than the availability of coping strategies" (Durham, 1992).The stress experienced by the teachers puts their physical as well as psychological health at risks (Pepe et al., 2018). Apart from stress, teachers also have to endure high levels of psychological distress (Fiorilli et al., 2017; Pepe, Addimando, Dagdukee & Veronese, 2019). The consequences of their prolonged exposure to stress causes psychological strain which manifests in the form of impaired work performance and poor teaching efficiency (Addimando, 2019; Capone & Petrillo, 2018). Hence, it is crucial to investigate the effects of stress and psychological distress on the productivity of teachers from a broader educational perspective in order to protect academic outcomes. Apart from stress, the organizational commitment experienced by the teachers also act as a significant predictor of their productivity (Hettiararchchi and Jayarathna, 2014; Tolentino, 2013).

In the context of business education, the concept of stress and its impact on teacher's productivity has not been researched widely. The significant and ever increasing developments being made in field of technology and the continued globalization of business expands the scope of business markets within which the business graduates compete following their education (Boronico, 2008). The business educators are therefore required to employ dynamic strategies to prepare the students for this dynamic market. The teachers are also constantly required to update their domain specific knowledge and exhibit the skills they are assumed to be able to teach. Such requirements put them under immense stress. Keeping the dynamic nature of business field in mind and from the perspective of teachers for the emerging leaders of tomorrow, understanding the

impact of stress experienced by them on their productivity is the need of the hour.

Thus, identifying factors that affect the productivity of business educators would contribute to the advancement of existing knowledge both theoretically (in terms of developing a model to study the productivity of business educators) and practically (in terms of suggesting measures to improve the productivity of teachers). In light of this background, the present study intends to explore the relationships among stress, psychological distress, organizational commitment and productivity of teachers in the context of business education.

**Consequences of teacher stress**

Stress is a significant predictor of psychological distress experienced by teachers. Psychological distress refers to subjective emotional distress that are usually articulated by means of various symptoms like anxiety, depression, reactions to grief, and similar other psychological conditions (Fortin et al., 2006). Chaplain (2008) found that the stress due to workload, lack of support, pupil's disruptive behavior and other factors attributed to occupational stress was a strong predictor of the psychological distress experienced by the teachers. Similarly, long working hours was also found to cause psychological distress among the male Japanese teachers by Bannai, Ukawa and Tamakoshi (2014).Leung, Siu and Spector (2000)reported that university teachers' perceived organizational practices and home/work interface, both significant sources of stress, best predicted the psychological distress experienced by them. In line with these studies, the relationship between psychological distress and stress have been tested in the present study using the following hypothesis:

H1: Stress has a significant impact on the psychological distress experienced by teachers

The high levels of stress and exhaustion due to work experienced by teachers have a significant impact on their organizational performance in the form of reduced commitment (Nagar, 2012). Ateş and İhtiyaroğlu (2018)who studied the causal relationship between stress and organizational commitment in employees from different sectors like education, health and tourism, found that the impact varied according to the sector. In the education sector, the impact of stress on commitment was found to be negative. Li, Liu, Yuan and Ju (2017) have also presented evidence for the adverse effect of stress on the organizational commitment of Chinese university faculties. An indirect impact through job satisfaction and job engagement was also observed by them. A study by Yuan and Liu (2017) also found that job stress significantly and negatively affected the organizational commitment of employees. The study identified both significant direct and indirect effect of stress on commitment through job engagement and burnout. Based on these findings, we propose the following to be tested in our study:

H2: Stress has a significant direct impact on the organizational commitment of teachers

Banerjee and Mehta (2016) found that stress experienced by the teachers of B schools due to work overload and poor interpersonal relationships had an impact on their job performance in terms of job avoidance, work-dissatisfaction, absenteeism and low productivity. A study by Adewale, Ghavifekr and Abdulsalam (2017) on the academic staff members from Nigerian universities showed that university faculties experience social, psychological, academic, student-imposed, and job-related stress, which in turn has a significantly and adversely affects their performance. A number of studies like Mbatha (2018), and Ayub, Hussain and Ghulamullah (2018) have also ascertained the negative influence of stress on the productivity of educators. Therefore, we propose the following for the study:

H3: Stress has a significant impact on the productivity of teachers

**Psychological distress**

There exists a great amount of evidence for the negative influence of psychological distress on performance of employees. It has been reported that psychological conditions like psychological distress decreases productivity at work (presenteeism) and increases work-related absences (absenteeism). For instance, a research conducted by Cocker et al. (2013) reported that psychological distress was associated with the presenteeism and absenteeism in SME managers/ owners. Holden et al. (2011) upon exploring the health conditions that affect productivity in working Australians found that along with drug and alcohol addiction, psychological distress had a huge influence on the rates of absenteeism and presenteeism in employees, compared to other health conditions that were considered in the study. Becher and Dollard (2016) reported that employees who experience psychological distress took more sick leaves per month than average and contributed to loss in higher productivity compared to those who did not experience psychological distress. In line with these studies, the current study also explores the adverse relationship between psychological distress and the productivity of teachers in the context of business education, using the following hypothesis:

H4: Psychological distress experienced by teachers has a significant impact on their productivity

**Organizational Commitment**

Organizational commitment of teachers implies their willingness "to expend personal, temporal and psychological resources on behalf of teaching" (Mowday, Porter & Steers, 2013). According to Allen and Meyer (1991), organizational commitment is "a psychological state that characterizes an employee's relationship with the organization and reduces the likelihood that he/ she will leave the organization". In other words, it can be inferred that organizational commitment reflects the rational behavior of employees to protect their professional and employment assets in the forms of salary, benefits and tenure (Bar-Haim, 2007). Organizational commitment comprises of three facets, namely, affective, normative and continuance commitment (Allen and Meyer, 1991). According to Meyer and Allen (1984), "affective commitment refers to the affirmative feelings of belongingness and attachment to the affairs of an employing organization; whereas, normative commitment represents their understanding of their obligation to remain in the organization." The continuance facet of commitment refers to "the degree of commitment that the employees exhibit towards their organization when they consider the penalty of leaving the organization" (Meyer & Allen, 1984).

The existence of a positive relationship between the organizational commitment of employees and their

productivity in terms of performance has been posited by various studies in the academic settings. For instance, Tolentino (2013) found that the organizational commitment of teachers had an impact on their teaching skills and classroom management. Hettiararchchi and Jayarathna (2014) reported that work related attitudes of teachers such as their organizational commitment, satisfaction and job involvement significantly predicted their job performance. Similarly, studies like Kawiana, Dewi, Martini and Suardana (2018), Osa and Amos (2014) have also found a significant positive association between employee commitment and their job performance. With respect to research productivity, a study by Becker, Kernan, Clark and Klein (2018) found that commitment to the profession had an impact on the intrinsic motivation of university teachers to engage in research activities which ultimately led to the setting up of more challenging research goals, commitment towards accomplishing those goals, spending quality time on doing research, all of which ultimately resulted in high levels of research productivity. Further, Perry, Hunter and Currall (2016) found that the organizational and professional commitment of employees working in research focused organizations has an impact on their research approach (i.e. on their innovation orientation). Based on the above discussion, we propose the following to be tested in the study:

H5: Organizational commitment of teachers has an impact on their productivity

**Productivity of teachers**

The productivity of teachers usually refer to the output produced by the teachers based on the inputs utilized. This output usually refers to the quality of students produced due to their effective teaching in classrooms (Giami, Oluwuo & Anyamele, 2018). The workload of academics involve two activities, teaching and research (Cadez, Dimovski, & Zaman Groff, 2017). The teaching effectiveness and research productivity of teachers were reported to be two uncorrelated and totally independent constructs by Marsh and Hattie (2002). However, studies like Galbraith and Merrill (2012) reported that the involvement of faculties in research activities is significantly related to their teaching effectiveness, as some teachers reported that their research activity enhanced their teaching. Thum (2003) reported that teacher effectiveness can be measured based on student assessment. Various studies have asserted the effectiveness of teaching as a measure of student outcomes (Goldhaber & Startz, 2017; Ndugu, 2014; Harris & Sass, 2011). Therefore, based on the above discussion, the productivity of teachers was studied in terms of teaching productivity, research productivity, and student outcomes in the study.

Certain gaps were identified from the literature review. Lack of studies investigating the cause of psychological distress experienced by teachers who teach management education have been found. Further, studies that explore the influence of psychological distress on the productivity of business educators have also been found to be minimum, in spite of realizing the increasing complexity and workload involved in providing business education. Recent studies that investigate the impact of teachers' commitment on their research productivity were found to be minimum (except Becker et al., 2018). There exists dearth of studies exploring this relationship among the management educators as well.

Overall, it was found that in the context of business education the effects of stress on productivity have not been explored widely and recently. The present study is an attempt to bridge these gaps in literature and add to the burgeoning body of knowledge on the impact of stress on academic outcomes.

**Methodology**

**Design and Participants**

The descriptive study adopted a deductive approach to describe the effects of stress on the productivity of Business educators. Based on prior literature, hypotheses were framed and tested. The study is empirical nature, accordingly quantitative data was gathered using a structured questionnaire. Structural Equation Modelling (SEM) was employed to develop a model that represents the relationships among the study variables. AMOS 7.0 in SPSS was employed for carrying out the SEM analysis.

The research sample included 408 Business educators working in Karnataka. A majority of the sample (70%) were above 30 years of age and were married employees (79%). Females constituted as majority (67%) of the population. Further, it was found that 78% of the respondents worked as assistant professors and as full-time employees (87%). Lastly, around 80% of the sample population were found to have more than 6 years of experience in the field which rendered the sample suitable for analyzing the research phenomenon.

**Scales of measurement**

Psychological distress manifests itself as symptoms of mental illness and anxiety. Stress manifests itself in the form of physical conditions like sleep disturbances. Therefore, in order to explore the effects of *Psychological distress* on productivity, it was conceptualized and measured as physical and mental stress. Allen and Meyers' (1991) conceptualization of *Organizational Commitment* as three distinct components (such as affective, normative, and continuance) was adopted in the study to measure the organizational commitment of Business educators. Lastly, *Productivity* of the Business educators was measured in terms of teaching productivity, Student outcomes and Research productivity. The constructs were measured using scales that were assigned a five-point Likert scale [ranging from 1-Strongly Disagree to 5-Strongly Agree].

**Results and discussion**

**Test of measurement model**

Confirmatory Factor Analysis (CFA) was carried out to assess the reliability and validity of the measures used in the study. The results are provided in Table 1. The standardized regression weights were found to be greater than 0.7 for most of the items except for a few. However, for these items also the t-values were found to be significant at the 0.001 level. It can be observed that all the items loaded under the respective sub-factor. This confirms the validity of the items in measuring the construct. The squared multiple correlations for all the items were found to be within the range of 0.180 and 0.810 which indicates that at least 18% variance in the indicators were explained by the underlying constructs. The measurement model was thus found to be valid and hence retained for constructing the structural model (shown in Figure 1).

**Table 1 Measurement model**

| Latent Variable | Item | SRW | t-value | R-squared |
|---|---|---|---|---|
| Psychological distress | MS_1 | 0.425 | 8.211 | 0.180 |
| | MS_2 | 0.651 | 12.721 | 0.424 |
| | MS_3 | 0.719 | 14.094 | 0.517 |
| | MS_4 | 0.732 | | 0.536 |
| | MS_5 | 0.889 | 17.365 | 0.791 |
| | MS_6 | 0.827 | 16.275 | 0.684 |
| | PS_1 | 0.639 | 8.418 | 0.408 |
| | PS_2 | 0.803 | 9.252 | 0.645 |
| | PS_3 | 0.526 | 7.563 | 0.277 |
| | PS_4 | 0.439 | 6.734 | 0.193 |
| | PS_5 | 0.621 | 8.302 | 0.386 |
| | PS_8 | 0.510 | 7.421 | 0.260 |
| | PS_9 | 0.515 | 7.467 | 0.265 |
| | PS_10 | 0.487 | | 0.237 |
| Organizational commitment | AffC_1 | 0.681 | 14.736 | 0.463 |
| | AffC_2 | 0.900 | 21.317 | 0.810 |
| | AffC_3 | 0.859 | 19.997 | 0.738 |
| | AffC_4 | 0.820 | 18.755 | 0.672 |
| | AffC_5 | 0.800 | | 0.64 |
| | CntC_1 | 0.722 | 15.218 | 0.522 |
| | CntC_2 | 0.721 | 15.186 | 0.52 |
| | CntC_3 | 0.822 | 17.777 | 0.675 |
| | CntC_4 | 0.710 | 14.897 | 0.504 |
| | CntC_5 | 0.792 | | 0.627 |
| | NC_1 | 0.779 | | 0.606 |
| | NC_2 | 0.852 | 14.867 | 0.726 |
| | NC_3 | 0.724 | 13.872 | 0.524 |
| Teacher's productivity | RP_2 | 0.597 | 8.411 | 0.357 |
| | RP_3 | 0.706 | 9.180 | 0.498 |
| | RP_4 | 0.648 | 8.798 | 0.420 |
| | RP_5 | 0.690 | 9.080 | 0.476 |
| | RP_6 | 0.604 | 8.461 | 0.364 |
| | RP_7 | 0.577 | 8.240 | 0.332 |
| | RP_8 | 0.555 | 8.050 | 0.308 |
| | RP_9 | 0.485 | 7.382 | 0.235 |
| | RP_10 | 0.506 | | 0.256 |
| | SO_1 | 0.842 | 10.176 | 0.710 |
| | SO_2 | 0.766 | 9.847 | 0.587 |
| | SO_5 | 0.515 | | 0.266 |
| | SO_9 | 0.436 | 6.998 | 0.190 |
| | TP_1 | 0.736 | 15.158 | 0.542 |
| | TP_2 | 0.747 | 15.415 | 0.559 |
| | TP_3 | 0.694 | 14.208 | 0.482 |
| | TP_4 | 0.659 | 13.417 | 0.434 |
| | TP_5 | 0.850 | 17.804 | 0.722 |
| | TP_6 | 0.722 | 14.838 | 0.521 |
| | TP_7 | 0.877 | 18.464 | 0.770 |
| | TP_8 | 0.778 | 16.114 | 0.605 |
| | TP_9 | 0.746 | | 0.557 |

*SRW – Standard Path Coefficient; MS- Mental Stress; PS- Physical Stress; AffC- Affective Commitment; CntC- Continuance Commitment; NC – Normative Commitment; RP- Research Productivity; SO- Student Outcomes; TP- Teaching Productivity*

**Test of structural model**

A variety of indices were used in the study for determining the fitness of the data gathered to the model developed. It can be observed that the value of Chi-square (CMIN/DF) is 4.332, NFI is 0.892, RFI is 0.829, IFI is 0.915, TLI is 0.863, CFI is 0.913 and RMSEA is 0.090. Most of the indices were found to be within the recommended limits which indicates that the data is a good fit for the model and the model can be adopted for studying the structural relationships among the variables. The results of hypotheses testing and the path coefficients of the structural model can be studied from Table2. The results provided support for all the hypotheses. All the factors, stress (B=-0.248), psychological distress (B=-0.471), and organizational commitment (B=0.9) had a significant impact on the productivity of teachers. Commitment had the greatest impact on productivity whereas stress and psychological distress had adverse significant impact on productivity. Further, stress had a direct positive impact on

psychological distress (B=0.846) and negative impact on the organizational commitment of business teachers (B=-0.395). Therefore, the study hypotheses H1 through H5 were accepted.

**Table 2 Hypothesis testing**

| Hypothesis | Path | | | Path coefficient | t-value | Result |
|---|---|---|---|---|---|---|
| H3 | Productivity | <--- | Stress Level | -0.248 | -2.275* | Supported |
| H4 | Productivity | <--- | Psychological Distress | -0.471 | -4.296*** | Supported |
| H1 | Psychological Distress | <--- | Stress Level | 0.846 | 10.33*** | Supported |
| H2 | Organizational Commitment | <--- | Stress Level | -0.395 | 5.828*** | Supported |
| H5 | Productivity | <--- | Organizational Commitment | 0.900 | 9.85*** | Supported |

** p<0.05, *** p<0.001; Model fit indices: CMIN/DF - 4.332; NFI - 0.892; RFI - 0.829; IFI - 0.915; TLI - 0.863; CFI - 0.913; RMSEA - 0.090*

The stress experienced by the business educators had a significant impact on their psychological distress which is a mental health problem characterized by anxiety and depression. Stress is thus a significant predictor of the mental health problems experienced by business education teachers. Similar findings were reported on teachers in general by Bannai, Ukawa and Tamakoshi (2014) and Chaplain (2008). Further, the stress experienced by the business teachers adversely affected their teaching productivity, research productivity and student outcomes. As the stress levels increased, their performance in the class reduced (Banerjee and Mehta, 2016; Adewale, Ghavifekr and Abdulsalam, 2017; Ayub, Hussain and Ghulamullah, 2018) so did their interest in participating in research activities. It was found that as the stress levels increase, their interest in planning for the class, using different pedagogical methods, obtaining feedback from students, and developing teaching skills decreases. Further, the level of stress experienced by teachers posited a strong influence in augmenting their research endeavors such as interest in publishing research articles, guiding other students in their research activities, and also working in various research projects. The stress experienced by business teachers also affected the academic outcomes of their students in terms of their assimilation ability, gaining knowledge, being disciplined and attitude towards studies.

The study results also support the earlier findings which showed that mental well-being of employees affects their performance (Cocker et al., 2013; Holden et al., 2011) by showing that the psychological distress experienced by business teachers significantly and negatively affected their productivity. The mental well-being of teachers is very much important for their performance in the classroom, participation in research activities and improving the academic performance of their students. The study results thus show that academic outcomes are significantly predicted by the stress and psychological distress experienced by the teachers.

Yet another significant predictor of business teachers' productivity was found to be their commitment towards the organization. Their levels of commitment towards their organization predicted their performance in the job (Hettiararchchi and Jayarathna, 2014; Tolentino, 2013) as well as their motivation in research (Perry, Hunter and Currall, 2016;Kernan, Clark and Klein, 2018).

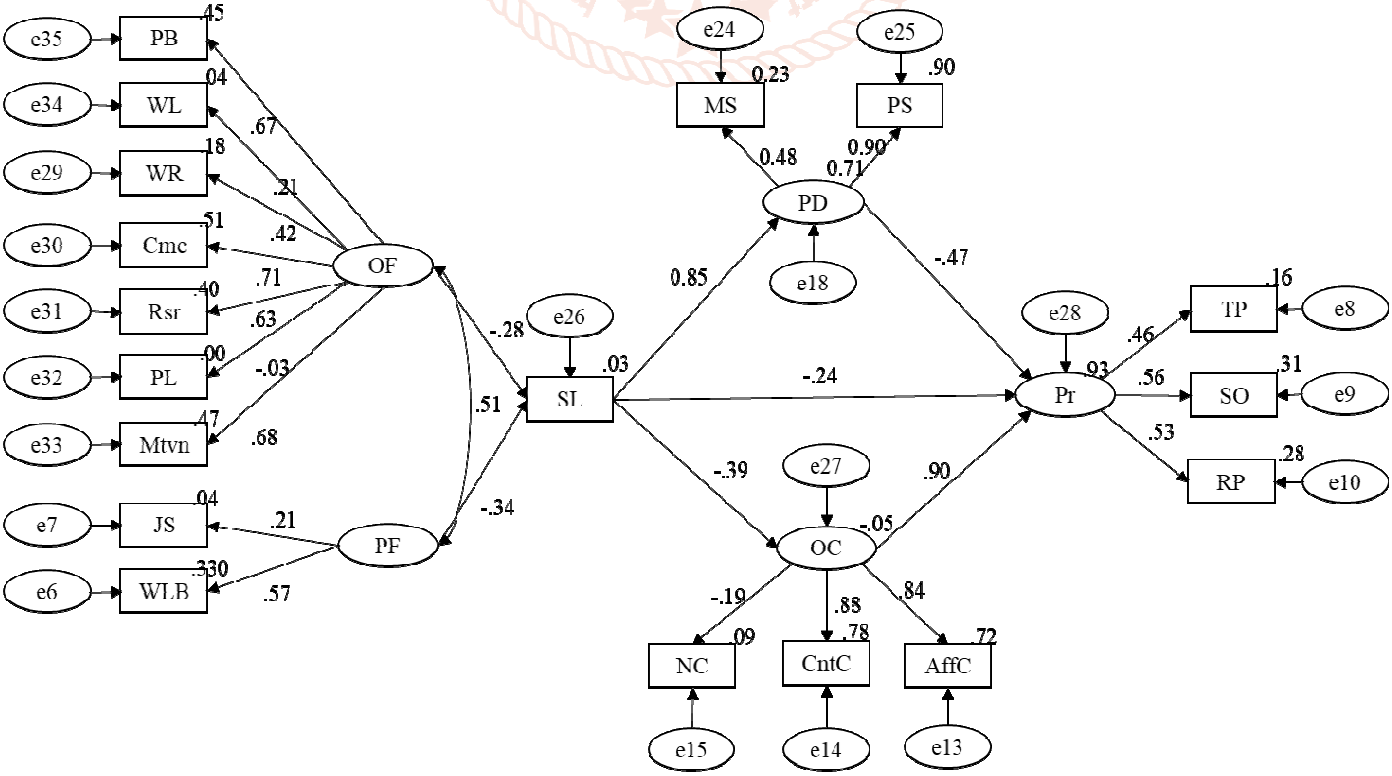


**Figure 1 Structural model for the study**

**Conclusion**

Information specific to the business education sector regarding the prevalence of psychological distress, and organizational commitment among teachers and the associated factors affecting these are needed for developing guidelines for managing the same and for promoting productivity in the business education sector. The present study found that organizational commitment and psychological distress affected the productivity of business teachers. While the former had a positive impact on productivity, the later negatively affected the productivity of teachers. Stress which is the most common predictor of Psychological distress also had a direct and adverse impact on the productivity of business teachers. In the light of these findings, the study suggests that the administrators of business education must take measures to regularly evaluate the physical and mental stress experienced by the teachers and take steps when needed to support them to combat stress. The teachers can be provided with all the support including resources and infrastructure facilities to deal with stress and get involved in research activities. Adequate training and workshops/ conferences must be conducted to help them update their knowledge in the dynamic business field and transfer the same to the students so that they are better equipped to face the job market.

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