



28<sup>th</sup> International Scientific Conference  
**Strategic Management**  
 and Decision Support Systems  
 in Strategic Management  
**SM2023**

Subotica (Serbia), 18-19 May, 2023

**Biljana Đorđević**

Faculty of Economics, University of Niš, Niš,  
 Republic of Serbia

biljana.djordjevic@eknfak.ni.ac.rs

**Sandra Milanović**

Faculty of Economics, University of Niš, Niš,  
 Republic of Serbia

sandra.milanovic@eknfak.ni.ac.rs

## **IMPACT OF FINANCIAL STRESS ON WORK ENGAGEMENT AND JOB PERFORMANCES OF THE EMPLOYEES IN THE REPUBLIC OF SERBIA: PILOT STUDY**

**Abstract:** Contemporary living conditions are challenging from many points of view. The COVID-19 pandemic still generates uncertainty and produces health and financial stress for many people. The current energetic crisis, by influencing inflation, also generates financial stress for many of them. On the other hand, organizations are under the pressure to be profitable and maintain productivity through workers' engagement. Based on the above, the subject of this paper is an investigation of the impact of financial stress on work engagement and job performance of employees in the Republic of Serbia. The aims of the paper are as follows: to find out whether financial stress influences work engagement and job performance of the employees in the Republic of Serbia, as well as to suggest the measures that employers could implement to reduce the financial stress of their employees. For this paper, a pilot study was conducted. The results of the study showed that financial stress significantly negatively influences two of three aspects of work engagement, further that dedication as one of the work engagement aspects significantly influence employees' performance, and finally, that financial stress does not have an influence on employees' performance, but mediated by dedication as one of work engagement aspect, has a negative influence on employees' performances. The contribution of the paper is twofold: it contributes to domestic literature through the empirical investigation of the impact of financial stress on the above-mentioned variables, and second, it draws attention to the employers on the importance of financial wellness programs for employees in the attempt to prevent or minimize the negative influence of financial stress on their performances.

**Keywords:** financial stress, work engagement, employee performance, financial wellness programs.

### **1. INTRODUCTION**

Stress is an integral part of everybody's life. People are exposed to stress at work, in traffic on the way home from work, in private life etc. (Davis & Mantler, 2004). Many people are also exposed to stress in their attempt to survive due to natural disasters or wars. One of the specific forms of stress to which people are exposed nowadays is financial stress as well. People face it trying to manage their finance, pay bills, scholarships and other costs of everyday life. This type of stress recently has been strongly influenced by the COVID-19 pandemic causing many people to lose their job or, in the best, to have unstable employment. In addition, energy source prices increasing due to the current energetic crisis caused inflation in many countries and decreased the relative value of employees' salaries. It caused many people additional difficulties to pay bills and other expenses.

Although financial stress is usually considered a private matter of a thing, many studies confirmed that it has an impact in working place as well. According to some research, financial stress causes distraction from work, absenteeism, reduced morale of employees, increased turnover etc. (Kim & Garman, 2003; Kim & 2004; Sabri & Aw, 2020). Some of the studies in the previous period focused on investigating how financial stress affects work engagement as well. In most of them, it was found that financial stress has a negative influence on it (Padula et al., 2012; Fiabane et al., 2013; Rahmi et al., 2020). Work engagement is, however, one of the most significant manifestations of employees' behaviour and attitudes

in a working place. As such, it has many important outcomes for organizations, such as organizational commitment, organizational citizenship behaviour, innovation, initiative, active learning behaviour, knowledge sharing, creativity, proactivity, adaptability, decision-making quality, safety behaviours etc. (Motyka, 2018). In short, the engagement of the employees is one of the key factors of an organization's success and competitiveness (Macey et al., 2009).

Financial stress also tends to influence employees' performance. In many studies, the negative impact was confirmed (Kim & Garman, 2003; Kim & Garman, 2004; Sabri & Aw, 2020). Consequently, financial stress tends to have a negative impact on organizational performance. As Qureshi et al. (2015) noted, if there is something that hinders employees' performance, that has a great potential to erode companies' profits. That put financial stress on employees as one of the significant issues of an organization to be dealt with.

Having in mind the importance of work engagement for employees' attitudes and behaviour, and hence organizational performances and success, as well as the fact that the current economic situation for many people in the Republic of Serbia (and worldwide) causes financial stress, the subject of the paper is defined. It is the investigation of the impact of financial stress on work engagement and job performance of the employees in the Republic of Serbia. The aims of the paper are as follows: to find out whether financial stress influences work engagement and job performance of the employees in the Republic of Serbia, as well as to suggest the measures that employers could implement to reduce the financial stress of their employees. For the purpose of the paper pilot study in which 112 respondents participated was conducted.

The paper consists of three parts. The first part of the paper contains a literature review on the concepts such as financial stress, work engagement and job performance as well as hypothesis development. The second part of the paper contains the results of the empirical study and their discussion, while the third part of the paper contains a suggestion for employers as well as concluding remarks.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

*Financial stress.* There are many definitions of stress, but this phenomenon generally could be defined as an „unpleasant feeling that one experiences when one perceives that something one values has been lost or is threatened" (Davis & Mantler, 2004, p. 2). These authors further state that the loss could be referred to as material things, social issues, symbolic issues or economic issues (job security, money etc.). People who experience stress are usually worried, have the sense that their life is controlled by external forces, are feared, and anxious, and demonstrate defensive attitudes and behaviour (Furnham, 1997).

Stress could have many sources. One that is the most influential is the stress derived from personal finances, i.e., financial stress. The reason for that is that many aspects of personal life and basic life activities are associated with personal financial resources (Bagwell, 2000).

Although the term „financial stress" is frequently used in everyday life and has extensive use in the literature, the generally accepted definitions still missing. According to some authors, financial stress is a subjective assessment of one's financial state, including the perceived ability to pay expenses, satisfaction with one's financial situation, amount of savings and investment, and debt anxiety (Kim & Garman, 2003). On the other side, Suprpto (2020) simply defined financial stress as that it is pressure derived from debt or the inability to meet an obligation. Although there are different definitions of financial stress (which in their foundation are more or less similar), the authors mostly agree that financial stress has a negative influence on many aspects of a person's life, such as health, financial well-being, psychological status etc. Financial stress can cause illnesses such as headaches, and high blood pressure (Choi, 2009), disturb financial status, i.e. financial well-being (Iramani & Lutfi, 2021), cause depression and anxiety (George & Kane, 2014) etc.

Many studies confirmed that the financial stress of employees has significant negative implications in the working place as well. In many studies it was found that financial stress causes distraction from work, absenteeism, reduced morale of employees, increased turnover etc. (Kim & Garman, 2003; Kim & Garman, 2004; Sabri & Aw, 2020).

*Work engagement.* Work engagement is a very important topic in the field of human resources, organizational psychology, work psychology, organizational behaviour, and many other areas, but also in business practice. One of the frequently cited definitions of work engagement in the literature is that it is "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication and absorption" (Schaufeli et al., 2006, p. 702). According to Schaufeli et al. (2002), a high level of vigour refers to the energy, mental resilience, and persistence of the employees. Dedication refers to the sense of significance, enthusiasm, inspiration, and pride in the job. Finally, absorption refers to working in a state of complete concentration on one's work.

As there are many definitions of this concept, there are also many classifications of the types of work engagement. According to some authors, there are intellectual, affective and social types of engagement of employees (Barkhuizen & Rothmann, 2006). Intellectual engagement refers to intensive thinking about work and how work can be done more efficiently and effectively. Affective engagement refers to the positive feeling that employees have while performing work, while social engagement refers to the active sharing of employees' opinions and attitudes with colleagues about possible improvements to work processes and activities. Saks (2006), for example, distinguishes two types of engagement: employee engagement, referring to the realization of professional activity, and organizational engagement, referring to the implementation of an organization member's role (Saks, 2006).

Many studies confirmed that work engagement has an impact on various types of employees' attitudes and behaviours. It was found that work engagement has a positive impact on job satisfaction, organizational commitment, work performance, financial returns, work-life balance etc. (Bakker et al., 2012; Albdour & Altarawneh, 2014; Yan et al., 2017, Wood et al. 2020). Motyka (2018), further, reported that according to various studies, work engagement has a positive impact on the initiative, active learning behaviour, knowledge sharing, creativity, proactivity, adaptability, decision-making quality, and safety behaviours of the employees.

Since work engagement has various positive influences on many individual and organizational outcomes, various mechanisms for its improvement are proposed in the literature. Stein et al. (2021), for example, suggest that organizations should try to make work less stressful and more enjoyable or reward employees with different kinds of financial and other rewards.

*Job performances.* Job performance is an important theme in the literature as well. This issue is important for both, employees and employers. Its importance for the employees stems from the fact that their performances influence many important issues in their professional life, such as job satisfaction, salary, promotion etc. The theme of job performance is important for employers as well since individual performance influences overall organizational performance.

Job performance is a complex concept as it is a multi-dimensional concept. In its essence job performances may be differentiated from the process and the outcome perspective (Sonnentag et al., 2008). Job performance from the process perspective refers to behaviour that employees demonstrate in performing their job. In other words that is the action itself (Campbell, et al., 1990). On the other side, job performance from the outcome perspective refers to the results of the employees' behaviour. However, the behavioural and outcome perspective are related, but not totally. Namely, in some cases, the employees' results are affected by determinants that are beyond their actions (Sonnentag et al., 2008).

A great deal of attention in the literature regarding job performances is paid to the distinction between task and contextual performances as well. It is noted that contextual performances are those activities that are comparable for almost all jobs, whereas task performance is job specific. Further, it is stressed that task performance depends mainly on employees' abilities, whereas contextual performances are mainly predicted by motivation and personality. Finally, the authors state that task performances are in-role behaviour and part of the formal job description, whereas contextual performances mostly refer to extra-role behaviour and are discretionary (Sonnentag et al., 2008).

For job performance measurement purposes various measures, and technics are developed so far. Those techniques range from rating scales, tests of job knowledge, and hands-on job samples, to checking the archive records (Campbell et al., 1990). However, performance ratings (i.e., peer ratings and supervisor ratings) are the most frequent way of measuring job performance (Viswesvaran et al., 1996).

All previous concepts are very important themes for academic researchers and practitioners. Therefore, many studies in this field were conducted so far.

A certain number of studies investigated how financial stress impacts employee engagement. In many of them, it was found that that impact is negative. For example, in the study conducted by ADP, LLC (2018) twenty-six per cent of the employees, ages 18 through 70, reported that their money issues (financial stress) hurt their engagement. In another study, it was found that 44% of employees with worsened financial health reported lower engagement (Birth Plan, 2021). In some earlier research it is reported that employees under high financial stress are distracted from their work and spend more time dealing with financial problems (Kim & Garman, 2004). Based on the above, the first hypothesis that we are going to test in the paper is:

*H1: Financial stress has a negative impact on the work engagement of the employees in the Republic of Serbia.*

Many studies in previous periods focused on the investigation of the relationship between work engagement and job performance. In most of them it was found that work engagement has a positive impact on in-role job performance (Schaufeli et al., 2006; Rich et al., 2010) as well as on productivity (Baumruk, 2004; Richman, 2006). Bakker and Bal (2010) similarly found that engaged teachers received higher ratings from their supervisors on their in-role performance. Yongxing et al. (2017) further, found that work engagement has a positive impact on job performance with the moderating effect of perceived organizational support. Based on the above, the second hypothesis that we are going to test in the paper is:

*H2: Work engagement of the employees in the Republic of Serbia has a positive impact on their job performance.*

Literature in the previous period also dealt with the relationship between financial stress and employees' performance. For example, it has been shown that financial stress promotes absenteeism (Kim & Garman, 2003). Kim and Garman (2004) also found that employees under high financial stress may be distracted from their work and would spend more time dealing with financial problems. More recently, Sabri and Aw (2020) found that financial stress has a negative impact on workplace productivity. Some investigations in previous periods have shown that the cost of financial stress to an employer is around \$ 5.000 per employee per year (George & Kane, 2014). When it is about the influence of work engagement on job performance, as was elaborated above, that influence in many studies found to be positive (Macey et al., 2009; Motyka, 2018). Having in mind these facts, the third hypothesis that is going to be tested in the paper is:

H3: Work engagement mediates the influence of financial stress on the job performance of the employees in the Republic of Serbia.

### 3. METHODOLOGY OF RESEARCH

*Sampling design and data collection.* The data that was used for the purposes of the paper was collected using a self-reported questionnaire in the period from January to February 2023. They were collected by the students of the Faculty of Economics in Niš during their internship in the organizations where they realized it. The data on which the hypotheses were tested consisted of 112 questionnaires filed by the respondents who participated in the pilot study.

*Measuring instruments.* To collect data on personal financial stress, the questionnaire developed by Turner et al. (1995) was used. The referred questionnaire consists of three questions assessed on the five-point Likert scale (from 1 = totally disagree to 5 = totally agree). One of the questions used in the survey was: "I have too many debts/I owe too much money." When it comes to the work engagement measurement and the assessments of the work engagement facets such as vigour, dedication, and absorption, the shorter version of the questionnaire named "Utrecht work engagement scale – UWES-9" was used. (Seppälä et al., 2009). This questionnaire is widely accepted and implemented by many authors. The level of work engagement of respondents was measured by nine questions divided into three segments and assessed on the 7-point Likert scale (from 1 = never to 7 = always). For example, the question that has been used was "I am proud of the work that I do". Lastly, the questions used for the detection of the self-reported level of employees' performances are derived from the questionnaire of Huey Yiing and Zaman Bin Ahmad (2009). Respondents ranked their job performance on the three scales depending on the question. The first question concerning the level of job performance was rated on a scale ranging from "does not meet the standard" to "exceeds standard". Furthermore, the employees' performance was assessed in comparison to others of the same rank from "low level" to "high level". Their job contributes to the organization in comparison to other members of the work unit was ranged from "less contribution" to "more contribution".

*Data analysis procedure.* The collected responses from respondents were analysed by the SPSS 23.0 software, the AMOS and the PROCESS macro extension developed by Hayes (2018). The analysis itself involved examinations of the respondents' demographics, the data's normality, the confirmatory factor analysis of the researched variables and the mediation research model constructed following the predetermined hypotheses. According to Hair et al. (2019), the cut-off points for Cronbach's alpha and average variance extracted (AVE) were 0.6 for the former and 0.5 for the latter. The presence of a relationship between research variables whose influence has been examined is indicated by bivariate correlation. Moreover, presumptions of regression analysis were tested. Following the recommendations of Hayes (2018), model 4 for parallel mediation was implemented. Bootstrapping procedure on 5000 observations and 95% confidence interval indicates an indirect effect of an independent variable through mediators on the dependent variable in the research model. Only a confidence interval that does not include zero was observed as evidence of the mediation effect.

### 4. RESEARCH RESULTS AND DISCUSSION

*Research results.* The following Table 1 indicated the structure of the sample. Of the 112 respondents, 72 were females. The dominant age cohort was between 36 and 45 years old and the majority of respondents held high school diplomas.

**Table 1.** The demographic structure of the sample

Item	Classification	N	% of the total sample
Gender	Male	40	35.7
	Female	72	64.3
Age	< 25	8	7.1
	26 - 35	16	14.3
	36-45	40	35.7
	46 - 55	38	33.9
	56-65	10	8.9
Education	High school	56	50.0
	Vocational education	28	25.0
	High education (BSc, MSc and PhD)	28	25.0

Source: Authors' calculations

In order to check the reliability and validity of the used scales, before the mediation analysis, a confirmatory factor analysis was conducted.

**Table 2.** Reliability of the variables

Variable		Factor loadings	Cronbach $\alpha$
Financial stress	FS1	.928	.932
	FS2	.895	
	FS3	.942	
Work engagement - Vigor	VI1	.828	.854
	VI2	.804	
	VI3	.747	
Work engagement - Dedication	DE1	.815	.908
	DE2	.794	
	DE3	.827	
Work engagement - Absorption	AB1	.736	.889
	AB2	.837	
	AB3	.839	
Employee Performance	EP1	.909	.909
	EP2	.910	
	EP3	.838	

Source: Authors' calculations

In Table 2 the reliability in the form of factor loadings and Cronbach alpha values is presented. All items describing one latent variable have satisfactory levels of reliability and none of them is below the cut-off point of 0.6. Moreover, factor loadings ranged between 0.763 and 0.942 for latent variables thus indicating satisfactory reliability larger than 0.5.

Table 3 presents the analysis of composite reliability (CR), average variance extracted (AVE), square root of AVE and correlations between latent variables.

**Table 3.** Validity of the variables

Variable	Mean	SD	CR	AVE	1	2	3	4	5
1. Financial stress	2.250	1.190	.935	.909	.935				
2. Work engagement - Vigor	3.554	1.164	.860	.818	-.302*	.904			
3. Work engagement - Dedication	4.339	1.468	.909	.876	-.354**	.489**	.936		
4. Work engagement - Absorption	4.006	1.516	.891	.854	-.118	.706**	.458**	.924	
5. Employee Performance	3.667	.860	.910	.878	-.032	.198	.522**	.290*	.937

Note: AVE – average variance extracted; On the diagonal square root of AVE as a measurement of discriminant validity of variables; \*\* correlation significant on the level of  $p < .01$ , \* correlation significant on the level of  $p < .05$ .

Source: Authors' calculations

Data referring to testing the validity and correlations testing indicates that each construct's CR was more than 0.7 and varied from 0.860 to 0.935. The AVE for each latent variable, however, was more than 0.5 and ranged from 0.818 to 0.909. These findings demonstrated the measures' strong convergent validity. The measurements and confirmation of variables' discriminant validity were further examined through a comparison of correlations and the square root of AVE. According to data from Table 3, it can be concluded that between financial stress and work engagement facets – vigour and dedication – exists a negative relationship. On the other hand, all aspects of work engagement are positively correlated indicating that they are related to each. This could be explained by the fact that they are used for assessment of the similar aspects of work engagement. Data from Table 3 also show that dedication and absorption as work engagement aspects are positively related to the employees' performance meaning that when dedication and absorption increase, the employees' performance will also increase.

In order to test the hypothesis we created a model in which financial stress was used as an independent variable, three aspects of work engagement (vigour, dedication and absorption) were used as mediator variables, while employees' performance was used as a dependent variable. Table 4 presents the results of the parallel mediation analysis we further conducted.

**Table 4.** Results of the parallel mediation

Relations	R <sup>2</sup>	F	B	SE	t	p	95% CI
path $a_1 = FS \rightarrow VI$	.091	6.716*	-.295	.114	-2.592	.012	[-.52; -.07]
path $a_2 = FS \rightarrow DE$	.125	8.979**	-.437	.146	-2.997	.004	[-.73; -.14]
path $a_3 = FS \rightarrow AB$	.014	.960	-.151	.154	-.9800	.332	[-.46; .16]
path $b_1 = VI \rightarrow EP$	.340	8.373***	-.103	.110	-.938	.353	[-.32; .12]
path $b_2 = DE \rightarrow EP$			.338	.075	4.509	.000	[.19; .49]
path $b_3 = AB \rightarrow EP$			.080	.094	.850	.340	[-.11; .27]
path $c' = FS \rightarrow EP$ (direct effect)			.106	.098	1.082	.284	[-.09; .30]
path $c = FS \rightarrow EP$ (total effect)	.001	.037	-.023	.119	-.192	.849	[-.26; .22]
path $ab$ (indirect effect)			-.129	.070			[-.27; .01]
VI $ab_1$			.035	.049			[-.04; .13]
DE $ab_2$			-.172	.068			[-.26; -.03]
AB $ab_3$			-.014	.030			[-.09; .04]

Note: \*\*significant on the level of  $p < .01$ , \*significant on the level of  $p < .05$ .

Source: Authors' calculations

The parallel mediation analysis has revealed that financial stress significantly negatively influences two of three categories of work engagement. Therefore, we may conclude that the first hypothesis (H1) is mostly confirmed. The data from Table 4 also shows that the influence of financial stress is less strong on vigour ( $\beta = -.295$ ,  $p < .05$ , 95% CI [-.52; -.07]) than on dedication ( $\beta = -.437$ ,  $p < .05$ , 95% CI [-.73; -.14]).

The parallel mediation analysis has also revealed that when it comes to the effect of dedication as a work engagement manifestation on employee performance significant influence was also found ( $\beta = .338$ ,  $p < .05$ , 95% CI [.19;.49]). However, no other significant influences of work engagement manifestations on employee performance are observed. Therefore, we may conclude that the second hypothesis (H2) is partially confirmed.

Finally, data from Table 4 show that the total mediation effect of financial stress on employee performance through three work engagement parts is not significant. Also, the direct effect of financial stress on employee performance is not significant. However, dedication emerged as a statistically significant mediator in the relationship between the independent and dependent variables in the model ( $\beta = -.172$ , 95% CI [-.26; -.03]). Therefore, we may conclude that the third research hypothesis (H3) is not confirmed when the total mediation effect is assessed, but it is partially confirmed since dedication emerged as a statistically significant mediator in the relationship between financial stress and employee performance.

*Discussion.* The previously presented research results were an attempt of the authors to show whether the financial stress of the employees in the Republic of Serbia negatively hits their engagement and performance. However, none of these effects was confirmed completely in the pilot study we conducted. However, since the survey is still ongoing, and the sample in the next step of the research will be bigger, the final results of this kind of research could be different. Hence, in the discussion part of the paper in this phase of the research, we put attention to finding supporting studies in the literature for our third hypothesis since it contains all variables that we used in the study. We found similar results as they are in our study in the study conducted by Junça Silva and Lopes (2021). Their research showed that when work engagement increases occupational stress decreases, but employees' performance increases. They also found that work engagement could be a mediator between the perceived organisational support predictor and employee performance even though the perceived organisational support predictor does not influence a dependent variable.

*Implication for the employers.* Since the financial stress of the employees tends to negatively influence employees performances by occupying their energy, time and focus, many employers started to implement Employee Financial Wellness Programs (EFWPs). This program aims to strengthen employees' financial well-being through services such as financial coaching, payroll advances and short-term instalment loans, credit counselling, debt management, and online financial management tools (Fox-Dichter et al., 2018). According to Fox-Dichter et al. (2018), a recent survey of employers found that many offered EFWPs to help their employees with financial struggles and also to improve their performance, increase retention, and decrease absenteeism. Although there are not many studies that investigated the influence of EFWPs so far, some of them confirmed that implementing wellness programs had a positive influence on employees' extrinsic and intrinsic job satisfaction levels within the organization (Marshall, 2020). Since job satisfaction has great potential to positively influence employees' performances, it is reasonable to believe that EFWPs have a positive influence on many outcomes important for employers.

## 5. CONCLUSION

Since many employees nowadays face financial stress due to job insecurity caused by the COVID-19 pandemic and inflation caused by the energetic crisis, this paper dealt with this category and its influence on work engagement and employee performance. After a theoretical review of these categories, the results of the empirical study were presented and analysed.

The empirical study conducted in the context of the Republic of Serbia had the form of a pilot study. However, some of the results are already indicative. For example, it was found that financial stress, when mediated by dedication as one of the aspects of work engagement, has a negative influence on employees' performance. Although the hypotheses in the research were not completely confirmed, this result encouraged authors to continue this research, so the survey is still ongoing.

The contribution of the paper is twofold. First, it full-fills the gap in the literature in the Republic of Serbia regarding the impact of financial stress on work engagement and job performance which, by the knowledge of the authors, has not been empirically investigated in this context. Further, this paper draws attention to the employer on the importance of EFWPs that could implement in their organizations to prevent or minimize the negative impact of financial stress on their employees and, consequently, on their performances.

However, this paper is not without limitations. This paper's primary weaknesses are the fact that it is based on the pilot study (and hence on a small sample of respondents) as well as on the convenience sampling method that was used in the empirical research. These facts prevent the generalization of the results of the study to the whole working population. Since the authors continued to carry out the empirical research, in the next phase more reliable empirical results are expected.

## REFERENCES

- ADP, LLC (2018). *Financial Stress Impacts Employee Engagement and Productivity*. Retrieved on March 23, 2023, from: [https://supplements.pionline.com/uploads/supplements/99-5192-0818\\_v4\\_WEB\\_FW-EE\\_Perspectives\\_WP\\_CA.pdf](https://supplements.pionline.com/uploads/supplements/99-5192-0818_v4_WEB_FW-EE_Perspectives_WP_CA.pdf)
- Albdour, A. A., & Altarawneh, I. I. (2014). Employee engagement and organizational commitment: Evidence from Jordan. *International Journal of Business*, 19(2), 192–212.
- Bagwell, D. C. (2000). Work and personal financial outcomes of employed individuals who participated in credit counselling. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University, Blacksburg.
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83, 189–206.
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L. (2012). Work engagement, performance, and active learning: The role of conscientiousness. *Journal of Vocational Behavior*, 80(2), 555–564.
- Barkhuizen, N., & Rothmann, S. (2006). Work Engagement of academic staff in South African higher education institutions. *Management Dynamics*, 15, 38-46.
- Baumruk, R. (2004). The missing link: the role of employee engagement in business success. *Workspan*, 47, 48-52.
- Birth Plan (2021). *The High Cost of Low Engagement: Keeping Employees Happy and Healthy in the Post-Covid Era*. Retrieved on March 30, 2023, from: <https://www.brightplan.com/>
- Campbell, C. H., Ford, P., Rumsey, M. G. & Pulakos, E. D. (1990). Development of multiple job performance measures in a representative sample of jobs. *Personnel Psychology*, 43, 277-300.
- Choi, L. (2009). Financial stress and its physical effects on individuals and communities, *Community development Investment Review*, 5(3), 120-122.
- Davis, C. G., & Mantler, J. (2004). The consequences of financial stress for individuals, families, and society. *Centre for Research on Stress, Coping and Well-being*. Carleton University, Ottawa.
- Fiabane, E., Giorgi, I., Squazzin, C. & Argentero, P. (2013). Work engagement and occupational stress in nurses and other healthcare workers: The role of organisational and personal factors. *Journal of Clinical Nursing*, 22(17–18), 2614–2624
- Fox-Dichter, S., Despard, M., Frank-Miller, E., & Germain, G. (2018). *Employee financial wellness programs: Differences in reach by race and ethnicity* (SPI Research Brief No. 18-01). St. Louis, MO: Washington University, Social Policy Institute.
- Furnham, A. (1997). Lay theories of work stress, *Work & Stress*, 11(1), 68-78,
- George, A., & Kane, M. (2016). Financial stress: The impact on individuals, employees, and employers. *Journal of Pension Benefits: Issues in Administration*, 24(1), 35-38.

- Hair, J.F.J., Black, W.C., Babin, B.J., & Anderson, R.E. (2019). *Multivariate Data Analysis (8th ed.)*. Cengage Learning EMEA.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis second edition: A regression-based approach. *New York, NY: Ebook the Guilford Press*.
- Huey Yiing, L., & Zaman Bin Ahmad, K. (2009). The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership & Organization Development Journal*, 30(1), 53-86.
- Iramani, R., & Lutfi, L. (2021). An integrated model of financial well-being: The role of financial behavior. *Accounting*, 7(3), 691-700.
- Junça Silva, A., & Lopes, C. (2021). Cognitive and affective predictors of occupational stress and job performance: the role of perceived organizational support and work engagement. *Journal of Economic and Administrative Sciences*.
- Kim, J., & Garman, E. T. (2003). Financial stress and absenteeism: An empirically derived research model. *Financial Counseling and Planning*, 14(1), 31-42.
- Kim, J., & Garman, E. T. (2004). Financial stress, pay satisfaction and workplace performance. *Compensation & Benefits Review*, 36(1), 69-76.
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). *Employee engagement: Tools for analysis, practice, and competitive advantage*. Chichester, UK: Wiley-Blackwell.
- Marshall, C. (2020). Analysis of a comprehensive wellness program's impact on job satisfaction in the workplace. *International Hospitality Review*, 34(2), 221-241. DOI 10.1108/IHR-05-2020-0014
- Motyka, B. (2018). Employee Engagement and performance: A systematic literature review. *International Journal of Management and Economics*, 54(3), 227-244.
- Padula, R. S., Chiavegato, L. D., Cabral, C. M. N., Almeida, T., Ortiz, T., & Carregaro, R. L. (2012). Is occupational stress associated with work engagement? *Work*, 41 (SUPPL.1), 2963-2965.
- Qureshi, M. I., Iftikhar, M., Janjua, S.Y., Zaman, K., Raja, U. M., & Javed, Y. (2015). Empirical investigation of mobbing, stress and employees' behavior at work place: Quantitatively refining a qualitative model. *Quality & Quantity*, 49(1), 93-113.
- Rahmi, T., Fitriana, E., Harding, D. & Agustiani, H. (2020). Stress and Work Engagement: Meaningful Work as Mediator. Conference: 2nd Progress in Social Science, Humanities and Education Research Symposium (PSSHRS 2020).
- Rich B. L, LePine J. A. & Crawford ER. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53, 617-635.
- Richman, A. (2006). Everyone wants an engaged workforce how can you create it? *Workspan*, 49, 36-39.
- Sabri, M. F. & Aw, E. C.-X. (2020). Untangling financial stress and workplace productivity: A serial mediation model. *Journal of Workplace Behavioral Health*, 35(4), 211-231.
- Saks, A. (2006). Antecedents and Consequences of Employee Engagement. *Journal of Managerial Psychology*, 21(6), 600-619.
- Schaufeli, W.B., Salanova, M., González-Romá, V. & Bakker, A.B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *J. Happiness Stud*, 3, 71-92.
- Schaufeli, W.B.; Bakker, A.; Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educ. Psychol. Meas*, 66, 701-716.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A., & Schaufeli, W. (2009). The construct validity of the Utrecht Work Engagement Scale: Multisample and longitudinal evidence. *Journal of Happiness studies*, 10, 459-481.
- Sonnentag, S., Volmer, J., & Spsychala, A. (2008). Job performance. *The Sage handbook of organizational behavior*, 1, 427-447.
- Stein, D., Hobson, N. Jachimowicz, M. J. & Whillans, A. (2021). How Companies Can Improve Employee Engagement Right Now. *Harvard Business Review*, 13 October.
- Suprpto, Y. (2020). Analysis of Factors Affecting Financial Well Being Millennial Generation in Batam. *J. Glob. Bus. Manag. Rev.* 2, 33-40.
- Turner, R.J., Wheaton, B., Lloyd, D.A., 1995. The epidemiology of social stress. *Am. Social. Rev.* 60(1), 104-125.
- Viswesvaran, c., Ones, D. S. & Schmidt, F. L. (1996). Comparative analysis of the reliability of job performance ratings. *Journal of Applied Psychology*, 81, 557-574.



- Wood, J. Oh, J. Park, J. & Kim, W. (2020). The Relationship Between Work Engagement and Work–Life Balance in Organizations: A Review of the Empirical Research. *Human Resource Development Review*, 1–23.
- Yan, X., Su, J., Wen, Z., & Luo, Z. (2017). The role of work engagement on the relationship between personality and job satisfaction in Chinese nurses. *Current Psychology*, 38(1), 1–6.
- Yongxing, G. Hongfei, D. Baoguo, X. & Lei, M. (2017). Work engagement and job performance: the moderating role of perceived organizational support. *Anales de Psicología*, 33(3), 708-713.