PREDICTIVE INFLUENCE OF ROLE OVERLOAD, JOB SATISFACTION, AND WORK ENGAGEMENT ON SELF-RATED PSYCHOLOGICAL WELLBEING: A QUANTITATIVE STUDY OF YOUNG WORKING ADULTS

Chibuzor Uchenna Onuoha^{1*} & Thomas Attah²

¹Adekunle Ajasin University, Akungba-Akoko Ondo State, Nigeria.

²Fetswallet, Lagos, Nigeria

*chibuzor.onuoha@aaua.edu.ng

ABSTRACT: Understanding the relationship between job attitudes and employee health outcomes is a key priority of people management practitioners. This present study contributes to expanding the wellbeing literature by examining role overload, job satisfaction, and work engagement influences on self-rated psychological wellbeing among employees in Ondo State. Using a cross-sectional research design, a total of 317 young working adults comprising 160 females (Mean age = 38.25; SD = 9.22) drawn from three large public sector organizations were purposively surveyed in the study. They completed standardized scales of role overload, job satisfaction, work engagement, and psychological wellbeing in the form of a self-report paper and pencil questionnaire. Moderate to high coefficient alpha reliability (α =.52 to α =.74) was reported in a pilot study to establish the cultural relevance of the items in each scale. Results of hierarchical regression analysis showed role overload to significantly and positively predict psychological wellbeing (β =.21, p <.05), and contributed 6% to variance in psychological wellbeing. Job satisfaction (p>.05) and work engagement (p>.05) did not predict psychological wellbeing. The study concludes that it appears challenging job demands may be necessary if the goal is to foster better psychological wellbeing in young working adults, particularly, among those in public sector organizations.

Keywords: Role Overload, Job Satisfaction, Work Engagement, Psychological Wellbeing, Young Working Adults

INTRODUCTION

Employment or work-related activity is the single activity occupying most adults waking lives. In many developing nations, young adults constitute a significant portion of the workforce and function in an increasingly turbulent, less stable and unpredictable work environment. These changes often elicit feelings of uncertainty and worry about their jobs (Shoss, 2017), which may impact negatively on their overall health outcomes (Nilsen et al., 2016), psychological wellbeing inclusive. Psychological wellbeing is defined as the positive thoughts and feelings that individuals use to evaluate their lives favourably (Boehm & Kubzansky, 2012; NIH Reports, 2018). Employees enjoying all-round healthier lives are reported to be happier and more productive than unhealthy employees (Bellet et al., 2019; Adam, 2019). Psychological wellbeing impacts work-life and work outcomes (Bakker et al., 2019; Karapinar et al. 2019;

Turban & Yan, 2016), and justify why it is widely studied in organizational contexts, internationally.

Work attitudes play a role in employees' psychological wellbeing. These include perception of role overload because employees' who perceived high role burden would be more likely to report feeling fatigued, and psychologically strained (Maslach et al., 1997). Job satisfaction relates to positive or negative judgments about the work environment and organizational membership (Weiss, 2002). Job experiences and expectations can induce affective reactions that may affect employees' psychological wellbeing. Work engagement relates to the level of vigor, dedication, and absorption displayed toward the job (Schaufeli & Bakker, 2004). Engaged employees are characteristically energetic, more dedicated and absorbed in their job tasks (Harter et al., 2002), and these behaviours can increase the risks of such workers becoming physically and mentally drained, with potential negative impact on their psychological wellbeing.

Examining the relationships among these work attitudes might provide useful insights into how and when changes may negatively affect psychological wellbeing and to identify preventive measures for effective targeted interventions aimed to foster better psychological wellbeing for younger adult employees in general, and among those in public sector organizations, in particular.

LITERATURE REVIEW

Role Overload and Psychological Wellbeing

As a special form of role conflict, role overload captures a work condition whereby employees report feeling psychologically and physically drained due to pressure arising from perceived high demands on their personal resources (e.g. intellect, time, energy, and capability) (Conley & Woosley, 2000; Eatough et al., 2011; Rizzo, et al., 1970; Spector & Jex, 1998). Role burden such as work pressure, lack of sufficient time, and other attributes of the workplace perceived as stressors may significantly increase perception of role overload.

Previous empirical studies have associated role overload with organizational and psychological wellbeing outcomes such as clinical depression and anxiety, higher job stress and job tension; physical health issues including fatigue, sleep impairment, higher turnover intention, and reduced in-role and extra-role behaviours (Ahn & Logan, 2022; Bolino & Turnley, 2005; Huang et al., 2022; LePine et al., 2005; Mazzola & Disselhorst, 2019; Shahram et al., 2014; Suyoung et al., 2022; Verbrugge, 1986). These past empirical studies highlight the potential health risks and associated high costs to the individual, group, and organization, particularly when employees perceive role overload (Alfes et al., 2018).

Role overload is increasingly a prevalent feature of most work organizations (Duxbury & Higgins, 2005). An employee is likely to self-perceive role overload when there is the feeling that the situational demands of the job exceeds their personal resources to accomplish the tasks within the allotted time. Such perception reflects the feeling that the task is resource-depleting and could cause the employee to feel drained, and that they lack the energy to continue the work (Schwab et al. 1986). This view is supported by the conservation of resources theory

(Hobfoll, 2001) which proposed that stress occurs when people are threatened by resource loss. The theory further argues that stressful situations (e.g. increased work load, and extended working hours) would lead to poorer psychological health through the perception of resource depletion (Halbesleben et al., 2014; Pearlin et al. 1990).

Job Satisfaction and Psychological Wellbeing

Organizational behaviour researchers' interest in job satisfaction may not be unconnected with its implication for desirable work outcomes. Job satisfaction is defined as the extent to which an employee like or dislikes their current job, and their personal accomplishments based on their job expectations (Aazami et al., 2015; Oshagbemi, 1999; Spector, 1997). Numerous studies have found job satisfaction to be related to organizational outcomes including organizational commitment, in-role and extra-role behaviours, workplace incivility, withdrawal behaviour, and retention rate (Bharadwaj et al. 2022; Duffy et al., 2016; Lei, et al., 2022; Opengart et al. 2022; Oyovwe-Tinuoye & Sambo, 2022; Tran, 2023).

Studies have shown job satisfaction to predict subjective health outcomes (e.g., Diener & Tay, 2012; Ray, 2022). A situational explanation anchored on the spillover hypothesis (Bowling et al. 2010) posits that job experiences will spill-over onto other spheres of life, implying that people who find their job pleasurable will be more likely to also report greater satisfaction with their life, and therefore can be expected to report better psychological wellbeing (Cao et al., 2022). In contrast, people who find the job experience less enjoyable will more likely report greater dissatisfaction, which in turn, may be harmful to their psychological wellbeing. Studies steered in this direction (e.g., Agarwal & Sharma, 2011; Bowling et al., 2010; Sudibjo & Manihuruk, 2022) have shown workplace stressors to be significantly and negatively related to psychological wellbeing.

Work Engagement and Psychological Wellbeing

Work engagement describes a pleasant state of mind at work associated with positive work-related outcomes (Seligman & Csikszentmihalyi, 2000). It is defined as a positive affective – cognitive state characterized by vigour, dedication, and absorption (Schaufeli & Bakker, 2004). Research has portrayed engaged employees as individuals who are emotionally connected to coworkers, cognitively vigilant, satisfied, and highly involved and enthusiastic about their job (Harter et al., 2002). The job demands-resource (JD-R) model provides a robust explanation of the motivational pathway of how work engagement arises. The JD-R posits that in their attempt to meet the challenging demands of the job, employees, through a concerted personal effort, try to maximize available job resources which further commit them to their work (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). Such employees could experience a stronger feeling of intrinsic motivation to perform better on assigned tasks because they sense that their psychological needs (such as competence, autonomy, and relatedness) are being satisfied (Wu & Lee, 2020).

Work engagement has been shown to positively relate to organizational outcomes including performance, use of personal initiative, organizational commitment, loyalty and customer satisfaction (Ismail et al., 2019; Zheng et al., 2020; Bakker et al. 2011; Xanthoipoulou et al. 2009). In addition, research suggests a strong link between work engagement and

psychological health outcomes. Specifically, work engagement has been reported to negatively correlate to health outcomes such as headaches, chest pain, and specific psychosomatic ailments, and less ill-health, sickness absence, and increased general health (Demerouti et al., 2001; Halbesleben, 2010; Shaufeli et al., 2009; Shimazu et al., 2012). These past findings provide compelling evidence clarifying that work engagement is significantly and negatively related to physical and psychological health outcomes.

Hypotheses

- i. Role overload will negatively predict psychological wellbeing among young working adults in Ondo State
- ii. Job satisfaction will positively predict psychological wellbeing among young working adults in Ondo State
- iii. Work engagement will negatively predict psychological wellbeing among young working adults in Ondo State

METHOD

Design and Participants

Using a cross-sectional research design, participants included a total of 317 employees drawn from the ministry of health, ministry of education and internal revenue board in Ondo State, Nigeria. The sample comprised of 160 females (Mage = 38.25; SD = 9.22). Job incumbents in these organizations are most likely to be impacted as a result of high attrition rate among young professionals in Nigeria recent years. Participants received a set of the study questionnaire with instruction to complete it privately. They completed the questionnaires at a time they believed it would less likely disrupt their work schedule (e.g. during lunch break). It took between eight to ten minutes, on the average to read through the items in each questionnaire. In order to analyze participants demographic characteristics, relevant descriptive statistics were performed including frequency counts and mean. The results revealed the following statistics; there were slightly more females (50.5%) than males (49.5%); majority were junior employees (68.1%), while the remainder (31.9%) were senior employees. Differences in education status showed that majority (86.4%) attended higher institutions of education, while the remainder (13.6%) was not educated beyond senior secondary school.

Measure

Role overload was assessed with the scale developed by Reily (1982). It is a 13-item research instrument for assessing an employee's perceived role burden on his/her current job. Respondents indicated their level of agreement to the test items on a five-point Likert response format that ranged from strongly disagree (1) to strongly agree (5). A Cronbach alpha coefficient of .88 was reported for the scale with a sample of Nigerian university workers (Lawal & Odedokun, 2020). Scores are interpreted so that high scores indicate higher role overload and low scores indicate lower role overload. Sample items on the scale include: 'I cannot ever seem to catch-up', and 'I need more hours in the day to do all the things that are expected of me'. In the present study, the scale yielded a Cronbach alpha of .71.

Job satisfaction was measured with the Generic Job Satisfaction Scale (Macdonald & MacIntyre, 2001). The ten items on the scale are assumed to assess the extent to which employees express satisfaction with their job in general. Items are scored on a 5-point Likert-type format with options that ranged from Strongly Disagree (1) to Strongly Agree (5). Sample items in the scale include: 'My wages are good', and 'I feel good about working in this organization'. MacDonald & MacIntyre (1997) reported a Cronbach alpha of .77, while Cigrang et.al (2000) reported a Cronbach alpha of .81 with a sample of white-collar employees. The Cronbach alpha of the scale in the present study is .64. Higher scores on the scale indicated higher levels of job satisfaction and vice versa.

Participants' engagement in their work was measured by the shortened version Utrecht Work Engagement Scale (Shaufeli et al., 2006). It is a 9-item research instrument written in short narratives that specifically attempt to elicit responses relating to employees' level of involvement with their current job. Items are scored on a 7-point Likert-type rating format ranging from 1 (strongly disagree) to 7 (strongly agree). Scores on the scale are interpreted such that high scores indicate higher levels of work engagement, while low scores suggest lower levels of work engagement. The UWES was preferred to other measures because it has previously been used with employees in many cross-national studies (Rattrie et al., 2020; Schaufeli et al., 2006). Sample items on the scale are: "At my work, I feel bursting with energy', and 'I am enthusiastic about my job'. The authors reported a Cronbach's alpha ranging from .89 to .97 with a sample of employees. In this present study, the scale yielded a moderate Cronbach alpha value of .51.

Psychological Wellbeing was assessed with the shortened version 18-item Psychological Wellbeing Scale (Ryff & Keyes, 1995). This multidimensional scale measures six facets of psychological wellbeing: autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Each facet has three items and respondents indicated their level of agreement via a six-point Likert-type scale anchored at 1 = strongly disagree and 6 = strongly agree. The scores ranged from 18 (lowest) to 108 (highest). The justification for preference of the short version is that its brevity increases its accessibility to research participants. In line with the objectives of this study, the composite score was calculated by summing the scores across the subscales. The Cronbach alpha coefficient with the present sample is .76.

Procedure

Goodwill permission to conduct the study was secured from the gatekeepers at the government offices selected for the research. This step was taken in order to enlist their support for access to the research participants. A set of inclusion criteria which served as a guide for the study were used as the yardstick for selecting eligible participants. Verbal consent was obtained from those who indicated willingness to participate in the research. This ensured that participation was voluntary and not out of compulsion. Three hundred and sixty-five (365) questionnaires were distributed, but only 317 were found suitable for use in the data analysis stage.

Data Analysis

Data were analyzed with the latest version of the Statistical Package for Social Sciences (SPSS). Bivariate correlations using the Pearson's Product Moment Correlation statistics was used to establish the relationships among the study variables. Hierarchical regression was performed to establish the contributions of the demographic variables, role overload, job satisfaction, and work engagement to self-reported psychological wellbeing.

RESULTS

Table 1. Socio-demographic characteristics of study participants

Variables Age (years)	Characteristics $Mean = 38.25$; $SD = 9.22$	Frequency (n)	Percentage (%)
Gender	Male	157	49.5
	Female	160	50.5
Job Position	Senior Cadre	101	31.9
	Junior Cadre	216	68.1
Education	Up to senior secondary school certificate	43	13.6
	Above senior secondary school certificate	274	86.4

Table 2. Mean, standard deviation scores, and bivariate relationships among the study variables (N=317)

S/N	Variable	Mean	SD	1	2	3	4	5	6	7	8
1	Age	38.25	9.22	1	_		•			·	
2	Gender	_	-	13*	1						
3	Job Position	-	-	33**	.05	1					
4	Education	-	-	.25**	14*	28**	1				
5	RO	37.38	9.25	.04	.07	.03	11	1			
6	JS	31.67	7.55	12*	.01	06	.19**	.29**	1		
7	WE	26.55	7.00	.03	.03	.01	.02	.35**	.43**	1	
8	PWB	57.86	15.08	06	.09	.06	12*	.25**	.04	.12*	1

^{**}*P*< 0.01, **P*< 0.05 (2-tailed)

Age was entered as a continuous variable. Gender was coded 1= Male, 2 = Female; Job Position was coded 1 = Senior Cadre; 2 = Junior Cadre; Education was coded 1 = Up to Senior Secondary School Certificate; 2 = Above Senior Secondary School Certificate. Role overload, job satisfaction, work engagement and psychological wellbeing were coded so that on each, high scores indicated a higher perception of the variable.

Table 2 shows the correlations among the predictors and the outcome variable. Education was significantly and negatively related to psychological wellbeing (r = -.12, p > .05), signifying that the higher the level of education, the poorer the psychological wellbeing. Age (r = -.06, p > .05), gender (r = .09, p > .05), and job position (r = .06, p > .05) had non-significant relationship with psychological wellbeing. Role overload was significantly and positively related to psychological wellbeing (r = .25, p < .01), implying that participants who self-perceived high role overload would be more likely to report better psychological wellbeing. There was a significant and positive association between work engagement and psychological wellbeing (r = .12, p < .05), suggesting that higher levels of work engagement led to better psychological wellbeing. Job satisfaction and psychological wellbeing were not significantly related (r = .04, p > .05).

Table 3: Hierarchical Regression analysis showing the contributions of RO, JS, and WE to PWB

		Steps	3	
Variables	1	2	3	4
Age	02	04	04	03
Gender	.08	.07	.07	.07
Job Position	.01	.01	.01	.01
Education	09	07	06	06
RO		.21**	.22**	.20**
JS			03	05
WE				.07
\mathbb{R}^2	.02	.06	.07	.07
F values	F(4, 305) =	F(5, 304) =	F(6, 303) =	F(7, 302) =
	1.54	4.12**	3.49**	3.19**

^{**}*P*< 0.01, **P*< 0.05 (2-tailed)

Table 3 shows the contributions of the control and psychological variables (age, gender, job position, education, role overload, job satisfaction, and work engagement) to psychological wellbeing. The hierarchical regression analysis showed that none of the control variables (age, gender, job position, and education) contributed to psychological wellbeing. Together, the control variables contributed 2% to the variance in psychological wellbeing, although this was not statistically significant. Role overload positively predicted psychological wellbeing (β = .21, p<.01) and contributed 6% to the variance in psychological wellbeing over and above the control variables. Hypothesis one was not supported. Job satisfaction (β = -.03, p>.05) and work engagement (β = -.05, p<.05) did not predict psychological wellbeing. Both variables contributed 7% a piece to the variance in psychological wellbeing, but this was not statistically significant. Hypotheses two and three were not supported by the data.

DISCUSSION

The study aimed to establish relationships among role overload, job satisfaction, work engagement and self-rated psychological wellbeing in a sample of young working adults in Ondo State, Nigeria. Of the three hypotheses tested, only one was confirmed. The findings

supported the hypothesized relationship demonstrating that role overload is a strong predictor of psychological wellbeing, although the relationship was not in the direction predicted in the study.

The findings showed that role overload significantly and positively predicted psychological wellbeing. It contradicted previous studies (e.g., Ahn & Logan, 2022; Bolino & Turnley, 2005; Huang et al., 2022; Mazzola & Disselhorst, 2019; Shahram et al., 2014; Suyoung et al., 2022) which had shown role overload to negatively predict health outcomes, and as such could be detrimental to employees' psychological wellbeing. While this finding may appear surprising, it is not totally unexpected when considered in the context of the young age of the study participants. Studies have shown age to affect how individuals interpret and cope with role stressors (e.g., Archer et al., 2015). Younger employees have a tendency to want to demonstrate their competence and further advance their career so that they may have perceived role overload as a positive challenge instead of a hindrance stressor (Podsakoff et al., 2007). The sample in the current study may have positively re-appraised the job demands, which in turn, may have strengthened their passion for the role activities, thus positively impacting their psychological wellbeing.

The hypothesis which assumed job satisfaction would have a positive influence on psychological wellbeing was not confirmed as hypothesized in the study (p>.05). The findings showed that job satisfaction had non-significant influence on psychological wellbeing. The outcome contradicted previous studies (e.g., Cao et al., 2022; Sudibjo & Manihuruk, 2022) which had confirmed job satisfaction to positively influence psychological wellbeing in a sample of employees. There are plausible explanations for the outcome with the present sample. For instance, it is possible that due to cultural dissimilarity, the study participants may have had difficulty relating to some items in the instruments used for data collection since these scales were developed in non-African environment. In other words, the study advocates for the use of indigenous research instruments which participants will be more likely relate to. Alternatively, the finding could be pointing to the fact that job satisfaction influence on psychological wellbeing may not be universal but rather contextual, varying by country and setting. The same argument as provided for the non-significant effect of job satisfaction on psychological wellbeing may also explain why work engagement did not predict psychological wellbeing as reported in the present study.

Conclusion and Implications

As found in this study, role overload positively predicted self-rated psychological wellbeing. Also, the findings showed that the higher the perception of role overload, the better the self-rated psychological wellbeing among young employees. The findings further showed that job satisfaction and work engagement did not predict psychological wellbeing with the study sample. The findings of this study have policy implication for target programmes aimed at improving psychological wellbeing of the workforce. In practical terms, the findings of the study suggest that researchers and practitioners in the field of human resource, and particularly those in charge of people management in organizations should bear in mind that role overload may be another route to promote psychological wellbeing, particularly among young employees. To achieve this goal may require the superintending officer intentionally assigning

moderately challenging but motivating tasks to this category of employees as part of their job responsibility.

Limitations

The limitations of the current study are spelled out as follows. Firstly, participants' selection lacked national spread as data collection was from one geopolitical zone which might affect the generalizability of the findings. Future research may consider replicating the study in other geopolitical zones in Nigeria to help improve the generalizability of the findings. Secondly, slightly more than two-thirds (68%) participants are low ranking employees, so that the findings might not provide a relatively generalizable picture of the psychological wellbeing of public sector employees across the cadre. Thirdly, there is high possibility of common method variance issue because of single sourced and self-reported data collection process adopted in the study. Lastly, causal relationships among role overload, job satisfaction, work engagement and psychological wellbeing could not be determined because data are cross-sectional. A longitudinal research study is suggested for future research as it would help shed light on the causal relationships.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commitment whatsoever that could pose a potential conflict of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

- Aazami, S., Shamsuddin, K., Akmail, S., & Azami, G. (2015). The relationship between job satisfaction and psychological/physical health among Malaysian working women. *The Malaysian Journal of Medical Sciences*, 22(4), 40-46.
- Adams, J.M. (2019). The value of worker wellbeing. *Public Health Reports*, 134(6), 583-586. doi.10.1177/0033354919878434.
- Agarwal, M., & Sharma, A. (2011). Effects of hospital workplace factors on the psychological well-being and job satisfaction of health care employees. *Journal of Health Management*, 13(4), 439-61. http://dx.doi.org/10.1177/097206341101300405.
- Ahn, S., & Logan, J.G. (2022). Perceived role overload and physical symptom experience among caregivers of older adults: The moderating effect of social support. *Geriatric Nursing*, 43, 197-205.

- Alfes, K., Shantz, A.D., & Ritz, A. (2018). A multilevel examination of the relationship between role overload and employee subjective health: The buffering effect of support climates. *Human Resources Management*, 57(2), 659-673.
- Archer, J.A., Lim, Z.M.T., Teh, H.C., Chang, W.C., & Annabel, S.H. (2015). The effect of age on the relationship between stress, wellbeing and health in a Singaporean sample. *Ageing International*, 40, 413-425. https://doi.org/10.1007/s12126-015-9225-3.
- Bakker, A.B., Albrecht, S.L., & Leiter, M.P. (2011). Key questions regarding work engagement. *European Journal of Work and Organisational Psychology*, 20(1) 4 -28.
- Bakker, A.B., Hetland, J., Olsen, O.K., & Espevik, R. (2019). Daily strengths use and employee wellbeing: The moderating role of personality. *Journal of Occupational and Organizational Psychology*, 92(1), 144-168.
- Bellet, C., De Neve, J., & Ward, G. (2019). Does employee happiness have an impact on productivity? Said Business School WP 2019-13. Available at https://ssrn.com/abstract-3470734.
- Bello, S., Oni, T.E., & Salawu, M.M. (2021). Job satisfaction and psychological health among health workers in Lagos State Teaching Hospital, Nigeria. *Annals of Ibadan Postgraduate Medicine*, 19(2), 147-155.
- Bharadwaj, S., Khan, N.A., & Yameen, M. (2022). Unbundling employer branding, job satisfaction, organisational identification and employee retention: A sequential mediation analysis. *Asia-Pacific Journal of Business Administration*, 14(3), 309-334.
- Boehm, J.K., & Kubzansky, L.D. (2012). The heart's content: The association between positive psychological wellbeing and cardiovascular health. *Psychological Bulletin*, *138*, 655-691.
- Bolino, M.C., & Turnley, W.H. (2005). The personal costs of citizenship behaviour: The relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology*, 90(4), 740-748.
- Bowling, N.A., Eschleman, K.J., & Wang, Q. (2010). A meta-analytic examination of the relationship between job satisfaction and subjective wellbeing. *Journal of Occupational and Organizational Psychology*, 83(4), 915-934.
- Cao, X., Zhang, H., Li, P., & Huang, X. (2022). The influence of mental health on job satisfaction: Mediating effect of psychological capital and social capital. *Frontiers in Public Health*, 10, 797274. doi: 10.3389/fpubh.2022.797274
- Cigrang, J.A., Todd, S.L., & Carbone, E.G. (2000). Stress management training for military trainees returned to duty after a mental health evaluation: effect on graduation rates. *Journal of Occupational Health Psychology*, 5, 48-55.

- Conley, S., & Woosley, S. (2000). Teacher role stress, higher order needs, and work outcomes. *Journal of Educational Administration*, *38*, 179-201.
- Demerouti, E., Bakker, A.B., De Longe, J., Jansen, P.P.M. & Schaufeli, W.B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of work, Environment and Health*, 27, 279-286.
- Diener, E., & Tay, L. (2012). A scientific review of the remarkable benefits of happiness for successful and healthy living. Report of the Well-Being Working Group, Royal Government of Bhutan: Report to the United Nations General Assembly, Wellbeing and Happiness: A New Development Paradigm, UN, NY.
- Duffy, R.D., Blustein, D.L., Diemer, M.A., & Autin, K.L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, 63(2), 127–148. https://doi.org/10.1037/cou0000140_
- Duxbury, L., & Higgins, C., (2005). Who is at risk? Predictors of work-life conflict (Report Four). Ottawa: Health Canada.
- Eatough, E.M., Chang, C.H., Miloslavic, S.A., & Johnson, R.E. (2011). Relationships of role stressors with organizational citizenship behaviour: A meta-analysis. *Journal of Applied Psychology*, 96(3), 619-632.
- Halbesleben, J.R.B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources and consequences. In A.B. Bakker & M.P. Leiter (Eds.), Work engagement: The essential in theory and research. Psychology Press: New York.
- Harter, J.K., Schmidt, F.L., & Hayes, T.L. (2002). Business level relationships between employee satisfaction, employee engagement and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Hobfoll, S.E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337-370.
- Huang, Q., Wang, Y., Yuan, K., & Liu, H. (2022). How role overload affects physical and psychological health of low-ranking government employees at different ages: The mediating role of burnout. *Safety and Health at Work, 13*(2), 207-212.
- Ismail, H.N., Iqbal, A., & Nasr, L. (2019). Employee engage and job performance in Lebanon: The mediating role of creativity. *International Journal of Productivity and Performance Management*, 68 (3), 506-523. https://doi.org/10.1108/ijppm-02-2018-0052.
- Karapinar, P.B., Camgoz, S.M., & Ekmekci, O.T. (2019). Employee wellbeing, workaholism, work-family conflict and instrumental spousal support: A moderated mediation model. *Journal of Happiness Studies*, 1, 1-21.

- Kubzansky, L.D., Huffman, J.C., Boehm, J.K., Hernandez, R., Kim, E.S., Koga, H.K., Feig, E.H., Lloyd-Jones, D.M., Seligmna, M.E.P & Labarthe, D.R. (2018). Positive psychological wellbeing and cardiovascular disease: JACC health promotion series. *Journal of the American College of Cardiology*, 72 (12), 1382-1396.
- Lawal, A.M., & Odedokun, E.A. (2020). The predictive value of length of service, role overload, and alcohol use on subjective happiness among university staff. *Nigerian Journal of Applied Behavioural Sciences*, 8, 730-740.
- Lei, Y., Zhou, Q., Ren, J., & Cui. X. (2022). From 'personal' to 'interpersonal': A multilevel approach to uncovering the relationship between job satisfaction and knowledge sharing among IT professionals. *Journal of Knowledge Management*, 26(6), 1566-1588.
- Lepine, J.A., Podsakoff, N.P. & Lepine, M.A. (2005). A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *The Academy of Management Journal*, 48(5), 764-775.
- MacDonald, S., & MacIntyre, P. (1997). The generic job satisfaction scale. Scale development and its correlates. *Employee Assistance Quarterly*, 13(2), 1-16.
- Maslach. C., Jackson, S.E., & Leiter, M.P. (1997). Maslach Burnout Inventory: Third edition. In C.P. Zalaquet & R.J. Wood (Eds.), Evaluating stress: A book of resources (pp. 191-218). Scarecrow Education.
- Mazzola, J.J., & Disselhorst, R. (2019). Should we be "challenging" employees?: A critical review and meta-analysis of the challenge-hindrance model of stress. *Journal of Organizational Behaviour*, 40(8), 949-961.
- NIH report (2018). Emotional wellbeing: Emerging insights and questions for future research. Bethesda, MD.
- Nilsen, C., Andel, R., Fritzell, J., & Kareholt, I. (2016). Work-related stress in midlife and all-cause mortality: Can sense of coherence modify this association? *European Journal of Public Health*, 26(6), 1055-1061. doi. 10.1093/eurpub/ckw086
- Opengart, R., Reio Jr, T.G., & Ding, W. (2022). Workplace incivility and job satisfaction: Mediating role of emotion management. *Research Anthology on Changing Dynamics of Diversity and safety in the Workforce*, 1237-1254.
- Oshagbemi, T. (1999). Overall job satisfaction: how good are single vs. multiple-item measures? *Journal of Managerial Psychology*, *14*, 388–403.
- Oyovwe-Tinuoye, G.o., & Sambo, A.S. (2022). Librarians perception of organizational culture and job satisfaction in federal universities in South-South Nigeria. *ATBU Journal of Science, Technology and Education*, 10(3), 391-398.

- Pearlin, L.I., Mullan, J.T., Semple, S.J., & Skaff, M.M. (1990). Caregiving and the stress process: An overview of concepts and their measures. *Gerontologist*, 30(5), 583-594.
- Podsakoff, N.P., LePine, J.A., & LePine, M.A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, and withdrawal behaviour: A meta-analysis. *Journal of Applied Psychology*, 92(2), 438-454. https://doi.org/10.1037/0021-9010-92.2.438
- Rattrie, L.T.B., Kittler, M.G., & Paul, K.I. (2020). Culture, burnout, and engagement: A metaanalysis on national cultural values as moderators in JD-R theory. *Applied Psychology: An International Review*, 69(1), 176–220. https://doi.org/10.1111/apps.12209.
- Reily, M.D. (1982). Working wives and convenience consumption. *Journal of Consumer Research*, 8(4), 407-418.
- Rizzo, J.R., House, R.J., & Lirtzman, S.I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15(2), 150-163.
- Roy, T.K. (2022). Work related wellbeing is associated with individual subjective wellbeing. *Industrial Health*, 60(3), 242-252.
- Ryff, C.D., & Keyes, C.L.M. (1995). The structure of psychological wellbeing revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Schaufeli, W.B., Bakker, A.B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. https://doi.org/10.1177/0013164405282471.
- Schwab, R.L., Jackson, S.E., & Schuler, R. S. (1986). Educator burnout: Sources and consequences. *Educational Research Quarterly*, 10(3), 14-30.
- Seligman, M.E.R., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shahram, H., Somayeh, A., & Behnam, G.F. (2014). The effect of occupational stress, psychological stress and burnout on employee performance: evidence from banking industry. *Management Science Letter*, 4:2101e6.
- Shaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organisational Behaviour*, 25, 293-315.
- Shaufeli, W.B., Bakker, A.B., & van Rhenen, W. (2009). How changes in job demands and job resources predict burnout, work engagement and sickness absenteeism. *Journal of Organisational Behaviour*, 30, 893-917.

- Shimazu, A., Schaufeli, W.B., Kubota, K., & Kawakami, N. (2012). Do workaholism and work engagement predict employee wellbeing and performance in opposite directions? *Industrial Health*, 50, 316-321.
- Shoss, M. K. (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43, 1911–1939
- Spector, P.E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3(4), 356–367.
- Spector, P.E. (1997). Job satisfaction: application, assessment, causes, and consequences. Thousand Oaks, CA: Sage Publications. http://dx.doi.org/10.4135/9781452231549.
- Sudibjo, N., & Manihuruk, A.M. (2022). How do happiness at work and perceived organisational support affect teachers' mental health through job satisfaction during the COVID-19 pandemic. *Psychology Research and Behaviour Management*, 15, 939-951.
- Suyoung, N., Martire, L.M., & Zhaoyang, R. (2022). Perceived gratitude, role overload, and mental health among spousal caregivers of older adults. *The Journal of Gerontology Series B*, 77(2), 295-299.
- Thiagarajan, P., Chakrabarty, S., & Taylor, R.D. (2006). A confirmatory factor analysis of Reily's role overload scale. *Educational and Psychological Measurement*, 66(4), 657-666.
- Tran, O.H.N. (2023). Exploring relationships among overload stress, work family conflict, job satisfaction, person-organisation fit, and organisational commitment in public organisations. *Public Organisation Review*, 23, 759-775.
- Turban, D.B., & Yan, W. (2016). Relationship of eudaimonia and hedonia with work outcomes. *Journal of Managerial Psychology*, 31(6), 1006-1020.
- Verbrugge, L.M. (1986). Role burdens and physical health of women and men. *Women Health*, 11(1), 47-77.
- Weiss, H.M. (2002). Deconstructing job satisfaction. Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12, 173–194. doi:10.1016/S1053-4822(02)00045-1.
- Wu, W.L., & Lee, Y. (2020). Do work engagement and transformational leadership facilitate knowledge sharing? A perspective of conservation of resources theory. *International Journal of Environmental Research and Public Health*, 17(7), 2165. doi.10.3390/ijerph17072615

- Xanthoupoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Organisational and Occupational Psychology*, 82, 183-200.
- Zheng, Y., Graham, L., Epitropaki, O., & Snappe, E. (2020). Service leadership, work engagement, and service performance: The moderating role of leader skills. *Group and Organization Management*, 45(1), 43-74. doi.10.101177/1059601119851978