



It's Ok Not to Be Ok: Work Engagement and Affective Commitment of Business and IT Faculty Members in Higher Education during the COVID-19 Pandemic

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Abstract.

In March 2020, the Coronavirus Disease 2019 (COVID-19) pandemic health crisis shook the education industry and forced abrupt changes both in the work environment and in learning modalities. Despite professional development and the availability of institutional support for online teaching and learning, a higher education institution in Manila, Philippines found that there was a higher rate of student-reported complaints regarding faculty performance (i.e. teacher absenteeism, insufficient teaching and learning materials for online learning, and the lack of feedback on learning inquiries) in full online learning modalities than in pre-pandemic face-to-face mode. To better understand the effects of these changes to the work engagement (i.e. vigor, dedication, and absorption) and affective commitment of higher education faculty in the midst of the COVID-19 pandemic, 65 faculty members teaching business and information technology were surveyed online using the Utrecht Work Engagement Scale 9 (UWES-9) and the Affective Commitment Scale. It was found that (1) work engagement leads to affective commitment, (2) that age and the years of service moderate work engagement and affective commitment, and that (3) gender makes no difference in either the work engagement and affective commitment of faculty members. Future longitudinal studies are recommended to explore other related variables such as job demand-resources and burnout in the academia.

Keywords: absorption, dedication, online modality, vigor, well-being

1. Introduction

The health crisis brought about by the COVID-19 pandemic shook the global education industry and resulted in a need for an immediate shift from face-to-face to online learning and working modalities. To support its faculty in making this sudden transition, a tertiary institution in the Philippines mandated all its faculty members to undergo professional development at the onset to prepare themselves specifically for the rigors of online teaching, as well as provided



continued support and assistance services. However, despite access to training opportunities, professional development and institutional support, a higher rate of dissatisfaction had been reported by students as compared to when in-person classes were being held, particularly about faculty absenteeism, the insufficiency of online teaching and learning materials, and the lack of responses to learning inquiries.

The heads of the business and information technology programs of the institution found in their investigation that their delinquent and underperforming faculty members were prioritizing personal commitments over work, which explained the poor job performance. However, several studies suggest that these unsatisfactory job outcomes are merely symptoms of a much deeper problem rooted in work engagement and commitment issues (Cook and Wall, 1980; Meyer and Allen, 2004; Rothbard and Patil, 2011; Schaufeli, 2012; Schaufeli et al., 2008).

Because work engagement is said to relate to organizational commitment and job satisfaction, as well as in the promotion of “in-role and extra-role performance, client satisfaction, proactivity, adaptivity, and creativity” in the workplace (Rothbard and Patil, 2011, p. 2), this study will aim to measure the work engagement of higher education faculty members from the business and information technology programs, analyze how it relates to their affective commitment, and determine what demographic variables moderate this relationship. This is to hopefully provide recommendations that can effectively improve remote or blended work conditions that foster better job performances among the teaching staff in the new normal.

1.1 Work Engagement

Work engagement, as defined by Schaufeli, et al. (2001), is a positive and persistent cognitive state of mind characterized by high energy and a strong identification with one’s employment (in Schaufeli & Bakker, 2004). Following Schaufeli and Bakker’s (2004) framework, there are three aspects that characterize work engagement: vigor, dedication, and absorption. *Vigor* is manifested in energy, resilience, and an initiative for one’s work; *dedication* is observed through active participation with a perceptible level of worth, passion, satisfaction, and challenge for the work accomplished; while *absorption* is distinguished as having high levels of concentration, being happily occupied with one’s task, and having a difficulty detaching oneself from work (Schaufeli & Bakker, 2004; Schaufeli, 2012; Schaufeli et al., 2008; Schaufeli et al., 2019).

In recent studies, vigor, dedication, and absorption are commonly measured using the Utrecht Work Engagement Scale-9 or UWES-9 (Schaufeli, et al., 2006; Bakker and Leiter, 2010; Bakker and Albrecht, 2018), which is a shortened 9-item version of the original 17-item Utrecht Work Engagement Scale by Schaufeli and Bakker in 2004. UWES-9 has been used as a predictor for several positive outcomes such as (1) job performance (Schaufeli, et al., 2008;



Schaufeli, 2012), (2) positive work attitude (Schaufeli, 2012), (3) good physical and mental health (Demerouti, Mostert, & Bakker, 2010; Schaufeli, et al., 2008; Schaufeli, 2012), (4) organizational commitment, as well as (5) job satisfaction (Schaufeli, et al., 2008; Demerouti, et al., 2010).

Shimazu, et al. (2014) further distinguish work engagement in contrast with workaholism in that the former is a positive and fulfilling association with work while the latter is a negative compulsion to work excessively hard. It is also worth noting that the level of work engagement in an individual has been found to change over time due to variables such as personal experiences and circumstances (Bakker & Albrecht, 2018).

1.2 Commitment

Commitment is defined as a psychological state that increases the probability of an employee staying within an organization (Herscovitch & Meyer, 2002). While researchers have had difficulty defining the constructs of commitment over the years, the concept has been distilled into having three distinct components: (1) *affective* commitment, which is the desire to stay with an organization; (2) *continuance* commitment, which is the perceived cost of leaving one's job; and (3) *normative* commitment, which is the perceived obligation to stay at one's job. These are the foundations for the construct of The Three-Component Model of Commitment by Meyer and Allen (1991), the most widely-accepted model of commitment which has since been considered as canon due to its congruence with previously accepted theoretical concepts (Bar-Haim, 2019). Moreover, these three components have been used separately depending on the aspect to be measured, and Meyer and Allen's measure of affective commitment in the Three-Component Model has been recognized and accepted on its own as "a distinct, discriminate, and influential construct" (Mercurio, 2015, p. 400).

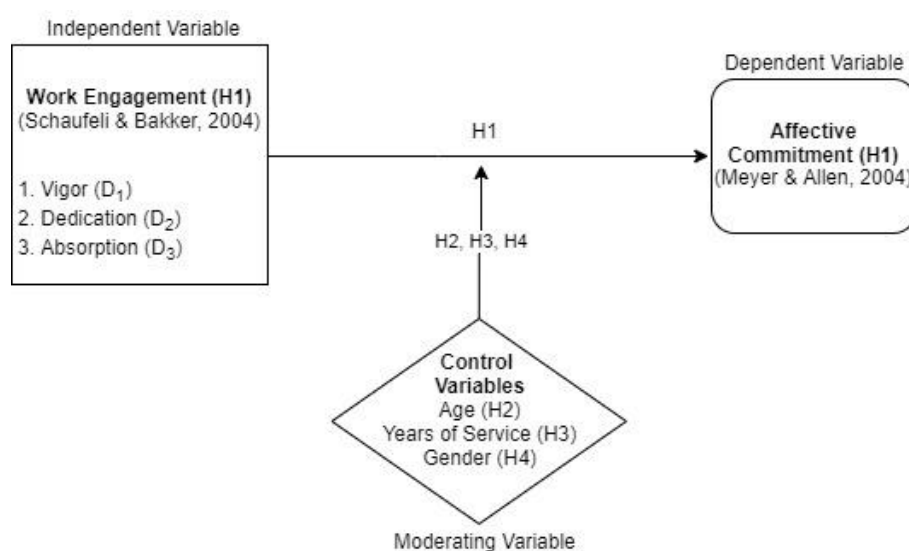
Incidentally, apart from job performance, affective commitment has also been found to influence job performance, work attendance, and satisfaction (Meyer and Allen, 2004) as it refers to the emotional attachment of employees to an organization (Meyer and Allen, 1991; Mercurio, 2015). Employees who have been found to have high affective commitment have been said to exhibit more confidence, stronger work ethics, as well as manifest higher satisfaction and motivation for the work that they do (Meyer and Allen, 1997). This translates to positive job outcomes such as maintaining regular attendance, doing their best, and showing initiative at work (Allen & Meyer, 1990; Meyer & Allen, 1997).

1.3 Work Engagement as Predictor of Affective Commitment



A number of studies have positively correlated and used work engagement interchangeably as either an independent, mediating, or dependent variable in relation to affective commitment (Ferrer & Morris, 2013; Poon, 2013; Scrima, et al., 2014; Choi, et al., 2015; Yalabik, et al., 2015; van Gelderen & Bik, 2016; Kloutsiniotis & Mihail, 2017; Mahmood & Sahar, 2017; Ogbuanya & Chukwuendo, 2017; van Dam, et al., 2017; Asif et al., 2019; De Guzman & Dumantay, 2019; Hu et al., 2019; Rayton et al., 2019; Ampofo, 2020; Cesário & Chambel, 2019; Jiang et al., 2020; Kotzé & Nelb, 2020; Teo et al., 2020), and found that employees who are engaged and involved at work tend to be more affectively committed to the organization (Choi, et al., 2015; Cesário and Chambel, 2019; Ampofo, 2020).

Figure 1: Theoretical framework of work engagement and affective commitment



Following the construct that work engagement is a predictor of affective commitment, this study’s operational variables, as shown in Figure 1, will use Schaufeli and Bakker’s (2004) dimensions of work engagement as independent variables and Meyer & Allen’s (2004) affective commitment as its dependent variable. The elements of continuance and normative types of commitment have purposefully been left out of this study’s framework as they have not necessarily been found to explain job outcomes, and appear irrelevant to adjunct faculty members whose contracts are on a per-term basis and who also make up the bulk of the teaching population to be studied.

In addition, Hu, et al. (2019) have found that age and years of service both increase work engagement and affective commitment but that gender has no effect on either. In this study, the same moderating variables (i.e. age, gender, and tenure or years of service) will be employed to test these findings.

Furthermore, there have been some empirical studies on work engagement and affective commitment set in tertiary education contexts. For instance, Ogbuanya and Chukwuendo

(2017) and De Guzman & Dumantay (2019) sampled aging and higher education faculty members in their research, while Poon (2013) and Ferrer and Morris (2013) had undergraduate students as their target respondents. However, since these studies were conducted prior to the COVID-19 pandemic, a reinvestigation in consideration of the unprecedented effects of the pandemic to work engagement and commitment among members of the academe may provide fresh insights that may be valuable for education leaders, administrators, human resources, and other service providers within the industry.

2. Methodology

2.1 Sample, Data Collection, and Design

A total of 138 full-time and part-time faculty members ($N = 138$) teaching under the business and information technology programs of a higher education institution in Manila, Philippines were surveyed for this study between August 28 and September 8, 2021. All academic employees had been working full time from home, and all classes had been conducted fully online due to the extended period of strict lockdown that the national government had mandated since March 2020 to mitigate the spread of the virus.

The 9-item Utrecht Work Engagement Scale (UWES-9) to assess vigor, dedication, and absorption and the revised 6-item Meyer and Allen Employee Commitment Survey (Meyer & Allen, 2004) to assess affective commitment were both encoded on a Google Forms document and distributed via a faculty mailing list to facilitate the distribution and data collection from the target respondents. The Cronbach's alpha of the UWES-9 and the Employee Commitment Survey were both ranging from .89 to .91, demonstrating the reliability of both instruments (Vaske et al., 2017).

This study is cross-sectional in nature as it was conducted at only one point in time (Sekaran & Bougie, 2014) between August and September 2021. Purposive sampling, specifically judgment sampling, was also used to save time. Based on the study's scope, business and information technology faculty members would be able to provide first-hand information, and hence are the ideal target participants for the purpose of this study.

2.2 Data Analysis

An online survey using Google Forms collected the data, and the responses were recorded in a Google Sheets file, which was then converted to an MS Excel file for analysis using Jamovi, a statistical software. The online survey contained nominal, ratio, and interval data types. Age and years of service were included in the ratio. The UWES-9 and affective commitment scales were considered interval data since both used a 7-point Likert scale.

For the causal research, the assumptions of normality (age ($SK = -.38$, $K = -0.99$), and years of service ($SK = .57$, $K = -.379$), linear relationship (Figure 2 in Appendix), independence ($DW = 1.72$), multicollinearity (VIF (ranges from 1.09 to 3.03), $TLRNC$ (ranges from .33 to .91) and heteroskedasticity (Breusch-Pagan, $p = .61$, Goldfeld-Quandt, $p = .30$, Harrison-McCabe, $p = .37$) were met.

Linear regression was used to determine if vigor, dedication, and absorption lead to affective commitment. Linear regression was also used to determine if age and years of service moderate vigor, dedication and absorption and lead to affective commitment. Lastly, a Student's t-test was used to determine the significant difference in vigor, dedication, absorption leading to affective commitment across gender.

3. Results and Discussion

3.1 Demographic Profile

Out of the 138 faculty members from the business and information technology programs who were asked to participate in the study, only 65 (47.1% retrieval rate) responded to the online survey. 51 were part-time (78.5%) and 14 were full-time (21.5%) faculty members from the business and information technology programs of a tertiary institution based in Manila, Philippines. Moreover, of the total 65 respondents, 37 were male (56.3%) and 28 were female (43.8%)

Table 1: Descriptive statistics of the demographic profile

Variable	<i>M</i>	<i>SD</i>
Mean	47.0	9.64
Gender	1.43	0.499
Number of years worked in the college	11.8	7.87

Table 1 shows the demographic profile of the business and information technology faculty respondents. The mean and standard deviation of variation of age are $M = 47$, and $SD = 9.6$. The mean and standard deviation for the number of years in service to the college are $M = 11.8$ and $SD = 7.87$.

Table 2: Age group (grouped data) of the respondents

Age Range	Count	% of Total
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26-35	10	15.4%
36-45	18	27.7%
46-55	24	36.9%
56-65	13	20.0%
Grand Total	65	100%

Table 2 shows the age ranges of the business and information technology faculty respondents. Forty-three percent (43%) of the respondents fall within the age range of 26 to 45 years old, while 56.9% fall within the age range of 46 to 65 years old.

3.2 Work engagement (Vigor, dedication, and absorption)

Table 3: Work engagement descriptive statistics

Variables	<i>M</i>	<i>SD</i>
VI	4.38	.97
DE	4.97	.95
AB	4.68	.77

Legend: VI = vigor, DE = dedication and AB = absorption

Table 3 shows the descriptive statistics of work engagement of the business and information technology faculty respondents. The mean score in dedication, $M = 4.97$, is higher than vigor, $M = 4.38$, and absorption, $M = 4.68$. The standard deviation in vigor, $SD = .95$, is higher than dedication, $SD = .95$, and absorption, $SD = .77$.

3.3 Affective Commitment

Table 4: Affective Commitment descriptive statistics

Variable	<i>M</i>	<i>SD</i>
Affective commitment	5.27	.92

Legend: AC = affective commitment

Table 4 shows the descriptive statistics of the affective commitment of business and information technology faculty members in the college. The mean and standard deviation of affective commitment are $M = 5.2$, $SD = .92$, respectively.

3.4 Correlation Matrix between variables



Table 5: Correlation between variables

		Your age	Number of Years worked in the College	Your Gender	VI	DE	AB	AC	
VI	Pearson's r		0.279	0.047	-	0.025	—		
	p-value		0.025	0.709	0.846	—			
DE	Pearson's r		0.121	-	0.106	-	0.751	—	
	p-value		0.337	0.400	0.767	< .001	—		
AB	Pearson's r		0.257	-	0.012	0.150	0.693	0.726	—
	p-value		0.039	0.926	0.234	< .001	< .001	—	
AC	Pearson's r		0.272	0.140	0.068	0.590	0.650	0.554	—
	p-value		0.029	0.267	0.591	< .001	< .001	< .001	—

Legend: VI = vigor, DE = dedication, AB = absorption, and AC = affective commitment

Table 5 shows the correlation between age, gender, years of service, vigor, dedication, absorption, and affective commitment. Age appears to positively correlate with all the variables, while number of years in service to the college is negatively correlated to dedication and absorption. Moreover, vigor, dedication, absorption, and affective commitment are moderately correlated.

3.5 Hypothesis testing

Hypothesis 1: Vigor, dedication and absorption lead to affective commitment among business and information technology faculty members in the college

Hypothesis 1 was supported since the regression model was statistically significant, $p < .001$. Dedication is statistically significant ($B = .18, p < .001$), while vigor ($B = .18, p = .23$) and absorption ($B = .13, p = .48$) are not statistically significant. Because the variables do not show multicollinearity and autocorrelation, the regression model is still supported; this

concludes that vigor, dedication, and absorption lead to affective commitment. Moreover, the adjusted R-squared is .41, which shows that the model is adequate.

Hypothesis 2: Age moderates the dimensions of work engagement (i.e. vigor, dedication, and absorption) leading to affective commitment among business and information technology faculty members in the college

Hypothesis 2 was supported since the regression model is statistically significant, $p < .001$, respectively. As mentioned in Hypothesis 1, there were no multicollinearity and autocorrelation of the variables. This concludes that age moderates vigor, dedication, and absorption leading to affective commitment, $B = 2.23$. There is no statistically significant interaction between age, vigor, dedication, and absorption, $p = .97$. Since the moderation model shows that there is a statistically significant moderator effect ($p < .001$), this concludes that age moderates the relationship between vigor, dedication, and absorption and affective commitment. This moderation model also shows that all the variables in this model must be included for it to be statistically significant. Moreover, the adjusted R-squared is .41, which shows that the model is adequate.

Hypothesis 3: The number of years of service in the college moderates vigor, dedication, and absorption leading to affective commitment among business and information technology faculty members in the college

Hypothesis 3 was supported since the regression model was statistically significant, $p < .001$, respectively. As mentioned in Hypothesis 1, there were no multicollinearity and autocorrelation of the variables. The number of years of service moderates vigor, dedication and absorption leading to affective commitment, $B = 1.02$. There is no statistically significant interaction between the number of years of service, vigor, dedication and absorption, $p = .33$. Since the moderation model shows that there is a statistically significant moderator effect, this concludes that the number of years of service moderates the relationship between vigor, dedication, and absorption and affective commitment. This moderation model also shows that all the variables in this model must be included for it to be statistically significant. Moreover, the adjusted R-squared is .41, which shows that the model is adequate.

Hypothesis 4: There is a significant difference across gender in terms of vigor, dedication, absorption, and affective commitment

Hypothesis 4 was not supported since the tests of significance of the Student's t-test was greater than .05 ($p > .05$). There is no significant difference across gender in terms of vigor, $p = .84$, dedication, $p = .75$, absorption, $p = .23$, and affective commitment, $p = .59$.

3.6 Summary of Findings

Based on the data presented, the following is a summary of the findings of this study:

The dimensions of work engagement (i.e. vigor, dedication, and absorption) were found to positively correlate with affective commitment, $r = .67$. Vigor, dedication and absorption were found to lead to affective commitment among business and information technology faculty members in the college, $p = <.001$, respectively. Adjusted R-squared is .42.

Age, vigor, dedication, and absorption were found to be positively correlated with affective commitment, $r = .67$. Age moderated the dimensions of work engagement (i.e. vigor, dedication, and absorption) leading to affective commitment among business and information technology faculty members in the college, $p = <.001$, respectively. Adjusted R-squared is .41.

The number of years in service to the college, vigor, dedication, and absorption were also positively correlated with affective commitment, $r = .67$. The number of years of service in the college likewise moderated vigor, dedication, and absorption leading to affective commitment among business and information technology faculty members in the college, $p = <.001$, respectively. Adjusted R-squared is .41.

However, there is no significant difference across gender in terms of vigor ($p = .84$), dedication ($p = .75$), absorption ($p = .23$), and affective commitment ($p = .59$), which is similar to the findings presented by Hu, et al. (2019).

4. Conclusion

The results of this study affirm that the dimensions of work engagement – vigor, dedication, and absorption – do lead to affective commitment and the findings are statistically significant, similar to the findings in Yalabik et al. (2015) and many other literature previously presented in this study. More importantly, the data reflects how faculty members of the business and information technology programs are engaged and affectively committed to their teaching jobs. The previously noted issues with faculty job performance may be attributed to the unprecedented circumstances we are all in while in the midst of the pandemic.

An increase in age as well as in the years of service both appear to have significant influences on work engagement, which is similar to the results of De Guzman and Dumantay (2019), Hu, et al. (2019), and Schaufeli and Bakker (2004). There was also no significant difference across gender, which means that the longer these faculty members work in the institution, the more emotionally invested they become to the program and organization they are serving, regardless of their gender.



This study also demonstrated that a work-from-home setup and a fully online mode of learning during a pandemic can result in positive work engagement and affective commitment in a higher education institution. This is similar to the results of studies focusing on educational contexts that had been completed before the pandemic (De Guzman and Dumantay, 2019; Ogbuanya and Chukwuendo, 2017), and therefore supports the idea that teaching can be just as meaningful online as it is in the pre-pandemic face-to-face modality.

However, it must be noted that because the sample size is too small, the generalizability of these results on work engagement and affective commitment cannot yet be established for the tertiary context. A more sizeable respondent population in subsequent replications and investigations can help eliminate biases and give its results more weight.

For related future research, perhaps it would be good to explore the influence of other variables such as educational attainment on work engagement and commitment in the academe. Longitudinal studies tracking the same cohort's work engagement and affective commitment over an extended period of time may also yield unexpected yet valuable results that otherwise would go undocumented.

Also, due to the unpredictability of the COVID-19 pandemic and its resultant changes in work setup, it may be wise to suggest to educational institutions to assess the work engagement and affective commitment of their employees intermittently in order to really understand what is happening at the ground level, and what nature of support their employees need in order to continue to perform well even under changing circumstances and environments.

Likewise, it has become apparent that members of academic communities need to be the focus of studies related to burnout and job demand-resources, too. Teachers are people, too, and this pandemic has forced every single one of us to face our fragile mortality despite the need to continue with our work and mission. It is important that educational institutions acknowledge the humanity of their employees through fundamental reforms in policy and practice to let them know that it's okay not to be okay all the time.

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References:

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18. doi: <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Ampofo, E. T. (2020). Mediation effects of job satisfaction and work engagement on the relationship between organisational embeddedness and affective commitment among frontline employees of star-rated hotels in Accra. *Journal of Hospitality and Tourism Management*, 44, 253-262. doi:<https://doi.org/10.1016/j.jhtm.2020.06.002>
- Asif, M., Qing, M., Hwang, J., & Hao, S. (2019). Ethical Leadership, Affective commitment, work engagement, and creativity: Testing a multiple mediation approach. *Sustainability*, 11(16), 1-17. doi:10.3390/su11164489
- Bakker, A. B., & Albrecht, S. (2018). Work engagement: Current trends. *Career Development International*, 23(1), 4-11. doi:<https://doi.org/10.1108/CDI-11-2017-0207>
- Bar-Haim, A. (2019). *Organizational commitment: The case of unrewarded behavior*. World Scientific Publishing Co. Pte. Ltd.
- Cesário, F., & Chambel, M. J. (2019). Linking organizational commitment and work engagement to employee performance. *Wiley Online Library*, 24(2), 152–158. doi:10.1002/KPM.1542
- Choi, S. B., Tran, T. B., & Park, B. I. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality*, 43(6), 931-944. doi:<https://doi.org/10.2224/sbp.2015.43.6.931>
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology*, 53(1), 39-52. doi:10.1111/j.2044-8325.1980.tb00005.x
- De Guzman, A. B., & Dumantay, M. F. (2019). Examining the role of future time perspective (FTP) and affective commitment on the work engagement of aging Filipino professors: A structural equation model. *Educational Gerontology*, 45(5), 324-333. doi:<https://doi.org/10.1080/03601277.2019.1622243>
- Ferrer, J. L., & Morris, L. (2013). Engaging elitism: The mediating effect of work engagement on affective commitment and quit intentions in two Australian university groups. *Higher Education Quarterly*, 67(4), 340-357. doi:10.1111/hequ.12020



- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a Three-Component Model. *Journal of Applied Psychology*, 87(3), 474–487. doi:10.1037//0021-9010.87.3.474
- Hu, B., Hou, Z., Mak, M. C., Xu, S. L., Yang, X., Hu, T., . . . Wen, Y. (2019). Work engagement, tenure, and external opportunities moderate perceived high-performance work systems and affective commitment. *Social Behavior and Personality*, 47(5), 1-16. doi:https://doi.org/10.2224/sbp.7353
- Jiang, Q., Hyeongkwon, L., & Xu, D. (2020). Challenge stressors, work engagement, and affective commitment among chinese public servants. *Public Personnel Management*, 49(4), 547-570.
- Kloutsiniotis, P. V., & Mihail, D. M. (2017). Linking innovative human resource practices, employee attitudes and intention to leave in healthcare services. *Employee Relations*, 39(1), 34-53. doi:10.1108/ER-11-2015-0205
- Kotzé, M., & Nelb, P. (2020). The influence of job resources on platinum mineworkers' work engagement. *The Extractive Industries and Society*, 7(1), 146-152.
- Mahmood, A., & Sahar, A. (2017). Impact of psychological empowerment and perceived career support on employee work engagement with the mediating role of affective commitment. *Pakistan Journal of Commerce and Social Sciences*, 1084-1099.
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative literature review. *Human Resource Development Review*, 14(4), 389–414. doi:https://doi.org/10.1177/1534484315603612
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89. doi:10.1016/1053-4822(91)90011-Z
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. SAGE Publications, Inc. doi:http://dx.doi.org/10.4135/9781452231556
- Meyer, J. P., & Allen, N. J. (2004). TCM employee commitment survey. *The University of Western Ontario*, 1-16.
- Ogbuanya, T. C., & Chukwuendo, S. O. (2017). Job crafting-satisfaction relationship in electrical/electronic technology education programme: Do work engagement and commitment matter? *Journal of Work and Organizational Psychology*, 33(3), 165-174. doi:https://doi.org/10.1016/j.rpto.2017.09.003



- Poon, J. M. (2013). Relationships among perceived career support, affective commitment, and work engagement. *International Journal of Psychology*, 48(6), 1148–1155. doi:<http://dx.doi.org/10.1080/00207594.2013.768768>
- Rayton, B., Yalabik, Z., & Rapti, A. (2019). Fit perceptions, work engagement, satisfaction and commitment. *Journal of Managerial Psychology*, 34(6), 401-414. doi:10.1108/JMP-02-2018-0074
- Rothbard, N. P., & Patil, S. V. (2011). Being there: Work engagement and positive organizational scholarship. In G. M. Spreitzer, & K. S. Cameron (Eds.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 1-25).
- Schaufeli, W., & Bakker, A. (2004). Utrecht work engagement scale manual. *Utrecht University*, 1-60.
- Schaufeli, W. B. (2012). Work engagement. What do we know and where do we go? *Romanian Journal of Applied Psychology*, 14(1), 3-10.
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57(2), 173-203. doi:10.1111/j.1464-0597.2007.00285.x
- Scrimaa, F., Lorito, L., Parry, E., & Falgares, G. (2014). The mediating role of work engagement on the relationship between job involvement and affective commitment. *The International Journal of Human Resource Management*, 25(15), 2159-2173. doi:[doi.org/10.1080/09585192.2013.862289](http://dx.doi.org/10.1080/09585192.2013.862289)
- Sekaran, U., & Bougie, R. (2014). *Research methods for business: A skill building approach*. Wiley Publishing.
- Sharma, J., & Dhar, R. L. (2016). Factors influencing job performance of nursing staff: Mediating role of affective commitment. *Personnel Review*, 45(1), 161-182. doi:10.1108/PR-01-2014-0007
- Shimazu, A., Schaufeli, W. B., Kamiyama, K., & Kawakami, N. (2014). Workaholism vs. work engagement: The two different predictors of future well-being and performance. *International Society of Behavioral Medicine*, 22, 18–23. doi:10.1007/s12529-014-9410-x
- Teo, S. T., Bentley, T., & Nguyen, D. (2020). Psychosocial work environment, work engagement, and employee commitment: A moderated, mediation model. *International*



Journal of Hospitality Management, 88, 1-10.
doi:<https://doi.org/10.1016/j.ijhm.2019.102415>

van Dam, K., van Vuuren, T., & Kemps, S. (2017). Sustainable employment: the importance of intrinsically valuable work and an age-supportive climate. *International Journal of Human Resource Management*, 28(17), 2449-2472. doi:<https://doi.org/10.1080/09585192.2015.1137607>

van Gelderen, B. R., & Bik, L. W. (2016). Affective organizational commitment, work engagement and service performance among police officers. *Policing: An International Journal*, 39(1), 206-221. doi:<https://doi.org/10.1108/PIJPSM-10-2015-0123>

Vaske, J. J., Beaman, J., & Sponarski, C. C. (2017). Rethinking internal consistency in Cronbach's Alpha. *Leisure sciences*, 39(2), 163-173.

Yalabik, Z. Y., Rossenberg, Y., Kinnie, N., & Swart, J. (2015). Engaged and committed? The relationship between work engagement and commitment in professional service firms. *The International Journal of Human Resource Management*, 26(12), 1602-1621. doi:<https://doi.org/10.1080/09585192.2014.953972>

Appendix

Figure 2: Q-Q Plot of the control variables (age, gender and years of service), independent variables (vigor, dedication and absorption), and dependent variable (affective commitment)

