

The Mediating Role of Work Engagement between Job Crafting and Job Performance among National Secondary School Teachers

Bhargkavi Pari¹
Alia Azalea²

¹*Department of Arts and Social Science, Centre for Foundation Studies, Universiti Tunku Abdul Rahman*

²*Department of Psychology and Counseling, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman*

¹Corresponding e-mail: [bhargkavip@utar.edu.my]

Employees who are able to craft their working atmosphere are expected to be more engaged with the tasks in their job, which eventually will boost their job performance. Based on Job Demands-Resources theory, this study hypothesised that work engagement mediates the relationship between secondary school teacher's job crafting and job performance. A quantitative design using questionnaires consisted of Job Crafting Scale, Utrecht Work Engagement Scale, Task-Based Job Performance Scale and Organizational Citizenship Measure. Four hundred secondary school teachers in the Kedah state located in the northern region of Malaysia were recruited for this study. Using PROCESS, a technique by Hayes (2015) this study was able to support its hypothesis. This study has contributed to the literature of job crafting in the Malaysian context. The findings of this study can be used by educational policymakers and school management to promote teacher's job crafting behaviour as it uplifts teachers' work engagement and eventually their job performance.

Keywords: work engagement, job crafting, job performance, teachers

Teachers are the backbone of a school structure as they are the ones having face-to-face contact with students. According to Kappagoda (2014), since teachers are working with the young generation, they need to have a free mind as well as flowing knowledge to concentrate on the teacher-learner process. It is important to seek the best out of the teachers' capacities as their students' success depend on it. A teacher's performance will not only determine a student's excellence but also voice out the teacher's effectiveness, which finally may contribute to the school's academic success. Therefore, it is important to understand how teachers' characteristics affect their performance.

Today, almost all working environment are competing with the changing atmosphere. As organisations are pressured to adapt to global, economic and technological developments, teachers are concerned with adapting themselves to the changes in the learning and teaching environment. Wellman and Spreitzer (2011) said that organisations should question their ability to keep up with the advancing knowledge, improve the working environment to be more practical and help young employees to advance their careers. Hence, it has been suggested that more attention should be given to employees who are interested in making their personal careers more meaningful.

Bakker and Bal (2010) revealed that work engagement relates positively to both teacher's and student's classroom performance. Therefore, it is believed that teachers' performances depends on how engaged they are in their jobs and how they keep their teaching profession in tune with their job preferences.

Nowadays, the role of teachers has advanced from teacher focused to student-centered and even the essential skills needed for a qualified teacher is said to be changing (Abd Hamid, Syed Hassan & Ismail, 2012), where teachers are not only required to meet the diverse needs of the students, but also to keep up with changes in the learning and teaching environment. According to Duncan (2015), teachers who are supported to solve issues using their own ability and experience are better resources for a school. An effective teacher will always be open to improve the teaching techniques, which is considered as job crafting, where employees are able to tailor their own job and position their work tasks to align with their personal interest and abilities (Tims, Bakker, Derks, & Van Rhenen, 2013). When employees alter their jobs on their own, they are able to use the unique knowledge they know about their job to craft a more meaningful job (Berg, Dutton & Wrzesniewski, 2013).

Studies have found that job crafting has a positive influence on the employee's work engagement (individual outcome) and job performance (organisational outcome) (Tims, Bakker & Derks, 2012; Wrzesniewski, LoBuglio, Dutton, & Berg, 2013). The employees who put their best in their work is said to be employees who are engaged in their work (Bakker, 2011). Work engagement is a lively and optimistic work related condition that is described by vigor, dedication and absorption (Bakker, 2011). *Vigor* is categorised as experiencing high levels of energy and being mentally resilient during work; *dedication* is being deeply involved

in one's work and feeling a sense of meaning, passion, inspiration and pride towards one's job; and *absorption* is how immersed people could be in their work as time passes (Bakker & Bal, 2010).

Work engagement predicts job performance better than other constructs as work engagement covers a longer performance episode. Furthermore, work engagement was found to be a stronger predictor on employee performance compared to job satisfaction (Çankır, & Arıkan, 2019). Campbell, McCloy, Oppler and Sager described job performance as tasks an individual does at work which are related to the organisation goals and it can be observed (as cited in Smither, 2012). Human resources generally keep the record of their employee's performance to identify if their performance matches with the organisation goals, able to deliver the products and services they are required to, and willingness to persist in the industry's competitive nature (Mahapatro, 2010).

There are few studies that have examined the link between job crafting, work engagement and job performance (Tims, Bakker & Derks, 2015). According to Tims et al. (2013) job crafting predicts job demands and job resources which indirectly influence work engagement. Job Demand Resources (JD-R) has consistently revealed that employees deliver their finest performance in a resourceful yet challenging work environment, as such environment smooth the way for their work engagement (Bakker & Demerouti, 2014). Moreover, the motivational process in the JD-R points out that job resources have the potentials to encourage high levels of work engagement and excellent performance (Tims & Bakker, 2010). Research has also suggested that employees with job crafting behaviour who organise their own resources may indirectly influence engagement and job performance (Bakker & Demerouti, 2014). Moreover,

longitudinal evidence suggest that over time, dimensions of job crafting is positively related to work engagement and task performance (Petrou, Demerouti, & Schaufeli, 2018; Petrou et al., 2015).

Consistently, Tims et al. (2012) also reported that employees who hold control over their working environment are the ones who manage to stay engaged and perform well. Job crafting accelerates engagement and indirectly performance, as individuals who change their work surroundings are ones who tend to align their work demands and resources to match with their capabilities and wants (Tims & Bakker, 2010). Tims et al. (2012) illustrate that since job crafting in terms of their job demands and job resources can ease work engagement and indirectly task performance, work engagement is predicted to mediate the relationship between job crafting and job performance.

Even by having the best education syllabi or exceptional teaching support systems, it is up to the teachers to make good use of them and bring the best out of the students. Today, teachers are under constant pressure to perform, as quality teachers define student's achievement (Jamil, Razak, Raju, & Mohamed, 2011). A study conducted by the Federal Schools Inspectorate of Malaysia found that 70% of teachers have good knowledge and required skills for the teaching contents, including a variety of teaching methods or techniques (Saleh & Aziz, 2012). Thus, the possibility for the students to have a more positive attitude toward learning are increased by such suitable teaching methods (Griggs & Dunn, 1996). Moreover, different teaching methods are needed as the teaching practices of teachers from four states in the northern region of peninsular Malaysia are still very much directed toward conventional teaching methods (i.e., teacher-centered) (Saleh & Aziz, 2012). It is important for the teachers to be equipped with job

crafting skills so that they could develop different teaching methods to keep the students occupied with the learning process.

The present study will be a significant endeavor in promoting job crafting and work engagement to increase teacher's job performance in a context where conventional teaching method is prominent. Teachers who are engaged in their jobs have a higher potential to achieve their educational goals and their enthusiasm would serve as a platform to bring together attentiveness, energy, excitement, and curiosity among students (Hakanen, Bakker & Schaufeli, 2006). Roth, Assor, Kanat-Maymon, and Kaplan (2007) found that students' self-determined academic behaviours increased when they are attended by engaged teachers who display self-determined teaching behaviours. Moreover, most of the previous studies were conducted in Western context (Tims et al., 2015), thus, the finding of the present study would enrich job crafting's literature in an Asian context, especially Malaysia.

As such, the aim of the present study is to investigate if job crafting has a direct or indirect effect on job performance by having work engagement as a mediator. The present study hypothesises that teacher's work engagement would mediate the relationship between job crafting and job performance.

Method

Participants

A total of 400 teachers from regular national government secondary school were conveniently selected to participate in this self-report survey. The research was conducted in Kedah, a state located in the northern region of Malaysia. A total of 262 women (65.5%) and 138 men (34.5%) participated in the study. The participant's

age ranged from 23 to 60 years ($M = 40.20$, $SD = 8.85$). Also, 184 (46%) of the teachers were Malays, 63 (15.8%) were Chinese, 145 (36.3%) were Indians and finally, 8 (2%) were Others. The teaching experience of the participants ranged from 1 to 37 years ($M = 14.93$ years, $SD = 8.90$).

Instruments

Job crafting was measured using Job crafting scale (JCS) developed by Tims et al. (2012). The continuous scale consists of 21 items that covered four dimensions. The first dimension, 'increasing structural job resources' was measured using five items (e.g., 'I try to learn new things at work'), the second dimension, 'increasing social job resources' was measured using five items (e.g., 'I ask others for feedback on my job performance'), third dimension, 'increasing challenging job demands' also contained five items (e.g., 'when there is not much to do at work, I see it as a chance to start new projects') and the last dimension, 'decreasing hindering job demands', consisted of six items (e.g., 'I make sure that my work is mentally less intense'). The responses used a 5-point Likert scale ranging from 1 (never) to 5 (always). The total score of JCS was computed by adding all scores in the four subscales. Higher scores indicate that the item being ranked was the characteristic of the employee.

Work engagement was measured using a shorter version of Utrecht Work Engagement Scale (UWES) (Schaufeli, Bakker, & Salanova, 2006). The continuous scale had a total of nine items, assessing all three engagement dimensions. Vigor consisted of three items (e.g., 'at my work, I feel bursting with energy'), dedication, three items (e.g., 'My job inspires me') and finally, absorption also with three items (e.g., 'I am immersed in my work'). The items in the questionnaire were measured on a 7-point Likert scale (0 = strongly disagree to 6 =

strongly agree). The total score of UWES was computed by adding all scores in the 3 subscales. A higher score indicated that employees are engaged in their work.

Job performance was assessed using the combination of Task-Based Job Performance Scale and Organizational Citizenship Measure scale (Goodman & Svyantek, 1999; Smith, Organ & Near, 1983). Therefore, the total measure included 25 items with the first 16 items from Organizational Citizenship Measure scale (e.g., 'Gives advance notice if unable to come to work') and the last nine items from Task-Based Job Performance Scale (e.g., 'Achieves the objectives of the job'). Each item was answered through 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). After reverse scoring items 6, 9 and 15 from Organizational Citizenship Measure scale, a total score of job performance was calculated by summing all items in the two subscales. The items rated will not be the characteristic of the employee when the total scores are low but when the total scores are high, the item rated would be the characteristic of the employee.

Cronbach's α of the instruments including all 21 items of Job Crafting Scale (JCS) is .883. For Work Engagement Scale (UWES) Cronbach's α of the instrument for all 9 items was .931. Lastly, the Cronbach's α of all 25 items to measure job performance was .875.

Pilot study

A pilot study was conducted to test the reliability of the scales. Fifty teachers were recruited for the pilot study. Among the 50 teachers, 16 were males (32%) and 34 were females (68%). The age of the participants ranged from 25 to 52 years old ($M = 36.72$, $SD = 6.79$). Also, 17 (34%) of the teachers were Malays, 6 (12%) were Chinese, 25 (50%) were Indians and finally, 2 (4%) were Others. The teaching

experience of the participants ranged from 2 to 27 years ($M = 12.06$, $SD = 6.81$).

According to the results of the pilot study, Cronbach's α of the Job Crafting Scale (JCS) was .868. The internal consistencies were .892 for increasing structural job resources, .783 for increasing social job resources, .850 for increasing challenging job demands and .820 for decreasing hindering job demands. For Work Engagement Scale (UWES) Cronbach's α was .917. The internal consistencies were .774 for vigor, .765 for dedication and .774 for absorption. Lastly, Cronbach's α of the overall measurement for job performance was .879. The internal consistency for organisational citizenship measure scale was .732 and for task performance scale it was .967. As all measures had a reliability of above .70, all measurements were considered reliable to be used in the Malaysian context (Pallant, 2011).

Procedure

After obtaining permission to conduct the study, together with the questionnaires, participant information sheet (PIS) were distributed to the school offices. The teachers were asked to submit the completed questionnaire to the school offices in the sealed envelope provided within five working days. After five working days, the researcher picked up the completed questionnaires from the respective school offices and thanked all the participants for their efforts to help in the study by providing a token of appreciation.

Results

Descriptive statistics

Table 1 presents the means and standard deviations for each of the study's variables and the correlations among the variables. Overall, participants reported well engaged in their job ($M = 42.29$, $SD = 7.98$). In

addition, participants reported high levels of job crafting behaviours ($M = 80.75$, $SD = 9.59$). Regarding job performance behaviours, participants viewed themselves as consistently able to perform well on tasks ($M = 133.29$, $SD = 15.38$).

Mediation

A mediation analysis was conducted to study teacher's job crafting's indirect effect on job performance with work engagement as the mediator. The procedure of PROCESS, a technique by Hayes (2015) was used to examine the mediation effect. Through this PROCESS, Hayes (2015), has presented 74 models templates in which mediation could be studied. For this research, model 4 had been selected (refer to Figure 1). The proposed mediator, work engagement, was regressed on job crafting while job performance was regressed on work engagement to produce the indirect effect. Thus, work engagement regressed on job crafting = .424, job performance regressed on work engagement = .785, and job performance regressed on job crafting = .346 (refer to Figure 1). Multiplying work engagement regressed on job crafting and job performance regressed on work engagement yielded the indirect effect, $.424 \times .785 = .333$.

This indirect effect of .333 implied that two teachers who differ by one unit in their reported job crafting were estimated to differ by .333 unit in their reported job performance as a result of the tendency for those who craft their work to feel more engaged with their work (since .424 is positive), which in turn translates into greater job performance (since .785 is positive). This indirect effect is statistically different from zero, as revealed by a 95% bootstrap confidence interval that is entirely above zero (.241 to .441 in the PROCESS output under the heading 'BootLLCI' and 'BootULCI', respectively).

Table 1

Means, Standard Deviations, and Correlations among Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Job Crafting	80.75	9.59	1.00		
2. Work Engagement	42.29	7.98	.509**	1.00	
3. Job Performances	133.29	15.38	.423**	.518**	1.00

** . Correlation is significant at the 0.01 level (2-tailed).

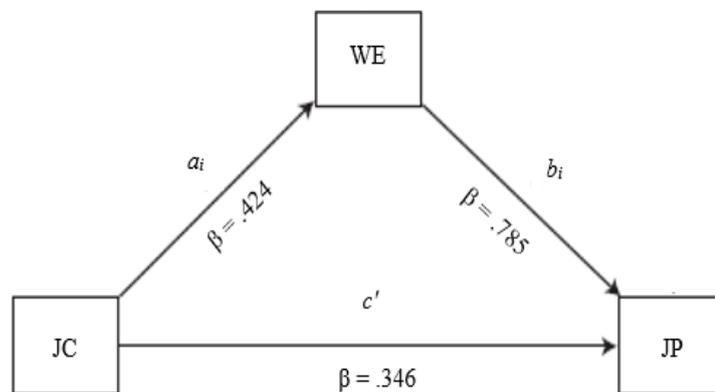


Figure 1. Mediation model.

The direct effect of job crafting, .346, is the estimated difference in job performance between two teachers experiencing the same level of work engagement but differ by one unit in their reported job crafting. The coefficient is positive, meaning that the teacher who craft his or her job more but is equally engaged with their work is estimated to be .346 units higher in his or her reported job performance. This direct effect is also statistically different from zero, $t(397) = 4.01, p < .001$, with a 95% confidence interval from .176 to .515. The total effect of job crafting on job performance is derived by summing the direct and indirect effects, or by regressing job performance on job crafting by itself: $= .346 + .333 = .679$. Two teachers who differ by one unit

in job crafting are estimated to differ by .679 units in their reported job performance. The positive sign means the teacher with higher job crafting behaviour reports higher job performance. This effect is also statistically different from zero, $t(398) = 9.41, p < .001$, with 95% confidence interval from .537 to .821. To conclude, there is a decrease in the effect of job crafting on job performance (from .679 to .346) when involving work engagement, suggesting that mediation has occurred. Thus, the hypothesis is supported.

Discussion

The result showed that job crafting is associated with higher job performance

when work engagement plays the mediating role. A study conducted in 13 organisations pointed out that when the team members perceived that they could equip themselves with resources to keep them engaged, those engaged teams performed better than others (Torrente, Salanova, Llorens, & Schaufeli, 2012). Torrente and his colleagues assumed that common emotions shared among the team members held the team properties such as team work engagement together. Fellow employees who share the same work environment interact both intentionally and unintentionally to influence one another and generate the rise in shared positive state such as team work engagement.

Tims et al. (2015) believe that employees who make changes to their tasks at work will not only be effective to perform better but also be able to direct the nature of their task to be interesting or fulfilling. According to Tims et al. (2015), when employees are supported to think about how they can make a variation in their working environment in terms of job demand and job resources, they may begin to feel more responsible for their engagement with their work. Higher levels of task and contextual performance can be achieved by engaged employees who invest sufficient energy to their work responsibilities (Christian, Garza, & Slaughter, 2011; Rich, LePine, & Crawford, 2010). Employees who are dedicated to their tasks will carry on performing their tasks efficiently, which will ultimately improve overall performance. Indeed, the present study reported that job crafting clearly relates to job performance through work engagement, which is consistent with other research (Tims et al., 2012; Tims et al., 2013).

Limitations and Future Studies

One of the present study's limitations is

the self-report bias since the results were based on participants' self-report. There were higher chances for the participants to provide socially desirable answers instead of the actual feelings or opinions with this method. Future research should consider integrating more objective data by including the principal's, senior assistant's or colleagues' opinion about the teacher's performance, in addition to the teacher's own perception of their performance. Secondly, the study used data collected from regular national government schools in one state in the northern region of Malaysia. Although this contributes to the literature on job crafting in the education sector, the use of one state in a country and one type of school to collect data may affect the generalisation of the study findings. There are different types of schools in Malaysia, such as Pre-school, Primary school, Technical and Vocational secondary school, Government assisted Religious schools, Malaysian Arts Schools, Malaysian School of Sports, Cluster School of Excellence and High Performance Schools. Therefore, future research should collect data from wider types of schools at various states in Malaysia.

Implications

The results of the study confirmed that work engagement mediates the relationship between job crafting and job performance. This study seeks to contribute to the current literature of job crafting, work engagement and job performance, especially with teachers in Malaysia and it managed to specify practical implication for motivating secondary school teachers in a Malaysian context. As job crafting was found to affect work engagement and job performance, hence job crafting could be considered as an important individual development at work. Without much introduction, job crafting would appear to be an unfamiliar terminology to teachers.

Thus, the teachers could be introduced to the job crafting techniques and taught how they could practise job crafting skills in their profession. Teachers could modify task-related aspects of their job, for instance, changing their teaching techniques, taking on different classes, or taking up a new role in any committee in the school. Changing the dimension of their task may refresh their energy, invoke creativity, and guide the teachers to try new things with ease.

Besides, teachers can also craft the relationship aspect of their job by spending more time with zealous and inspiring co-teachers. These teachers will help to make their everyday teaching more positive. Moreover, teachers can also increase their interactions with students who in turn will help to revive their passion for teaching. They could also alter the perceptions about their own job through cognitive crafting (e.g., when a teacher feels that the teaching profession is taking a toll on them, they could think about the impact they make on students and the society to motivate themselves).

Overall, the present study offers promising results, indicating that job crafting is a significant process that relates to both work engagement and performance. However, for teachers to practise job crafting, they need support from the school management to encourage and provide the platform. It would also be beneficial if there were support from the Ministry of Education as educational policy makers to possibly include teacher's job crafting in the country's educational planning besides providing structural support such as training to teachers and recognition for the efforts made by the teachers to craft their job and improve their job performance. Due to the fact that job crafting is a new and developing subject matter in Malaysia, this study hoped to inspire more future research on this topic.

Conclusion

The present study has stretched our understanding on the connection existing among job crafting, work engagement and job performance. The findings propose that job crafting can be an effective way for teachers to boost their work engagement and eventually perform better. Mainly, this research explored the effects of job crafting among teachers. Thus, school management and educational policy makers should play their roles and assist teachers with their job crafting behaviour to be done in alignment with the educational goals to uplift work engagement and eventually performance to a higher level. Teachers should show their motivation to constantly align their job characteristics to match with their personal preferences and capabilities as it will eventually influence students' and schools' academic outcomes. Ultimately, job crafting is a chance for Ministry of Education, school management and teachers to increase teacher's work engagement and job performance, which will eventually result in better performing students and school's academic success.

Acknowledgement

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

References

- Abd Hamid, S. R., Syed Hassan, S. S., & Ismail, N. H. (2012). Teaching quality and performance among experienced teachers in Malaysia. *Australian Journal of Teacher Education*, 37(11), 85-103.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265-269. Retrieved from <http://pop->

- lab.com/beheer/userupload/files/41.pdf
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189-206. Retrieved from http://matthijsbal.com/articles/Bakker_Bal_2010_JOOP.pdf
- Bakker, A. B., & Demerouti, E. (2014). Job demands- resources theory. In C. Cooper, & P. Chen (Eds.), *Wellbeing: A complete reference guide* (pp. 37–64). Chichester, UK: Wiley-Blackwell.
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81-104). Washington, DC: American Psychological Association.
- Çankır, B., & Arıkan, S. (2019). Examining Work Engagement and Job Satisfaction Variables in their Relations with Job Performance and Intention to Quit. *İşletme Araştırmaları Dergisi*, 1133-1150.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136.
- Duncan, A. (2015). Why teaching is the most important profession. Retrieved December, 23, 2016 from <https://www.linkedin.com/pulse/leading-from-classroom-arne-duncan>
- Goodman, S. A., & Svyantek, D. J. (1999). Person–organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2), 254-275.
- Griggs, S., & Dunn, R. (1996) Hispanic-American Students and Learning Style. Eric Digest. (ERIC Document Reproduction Service No. 393607). Retrieved from <http://files.eric.ed.gov/fulltext/ED393607.pdf>
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of school psychology*, 43(6), 495-513.
- Hayes, A. F. (2015). The PROCESS macro for SPSS and SAS. Retrieved January 23, 2015 from <http://www.processmacro.org/index.html>
- Jamil, H., Razak, A., Raju, R., & Mohamed, A. R. (2011). Teacher professional development in Malaysia: Issues and challenges. In *Africa-Asia University Dialogue for Educational Development Report of the International Experience Sharing Seminar: Actual Status and Issues of Teacher Professional Development* (p.85-102). CICE Series 5. Hiroshima: Hiroshima University.
- Kappagoda, S. (2014). Emotional intelligence as a predictor of work-family conflict among school teachers in North Central Province in Sri Lanka. *The IUP Journal of Organizational Behavior*, 13(3), 53-68.
- Mahapatro, B.B. (2010). *Human Resource Management*. Retrieved from <http://vcm.qums.ac.ir/portal/file/showfile.aspx?id=7ae1fbd8-c088-4edd-bef8-9f77a1be432d>
- Pallant, J. (2011). *SPSS Survival Manual 4th edition: A step by step guide to data analysis using SPSS version 18*. Maidenhead, UK: Open University Press.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2018). Crafting the change: The role of employee job crafting behaviors for successful

- organizational change. *Journal of Management*, 44, 1766–1792.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2015). Job crafting in changing organizations: Antecedents and implications for exhaustion and performance. *Journal of Occupational Health Psychology*, 20, 470–480.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635.
- Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, 99(4), 761-774.
- Saleh, S., & Aziz, A. (2012). Teaching practices among secondary school teachers in Malaysia. *International Proceedings of Economics Development and Research*, 47, 63-67.
- 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.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
- Smither, J.W. (2012). Performances management. In S. Kozlowski (Ed.), *The Oxford handbook of organizational psychology volume 1* (pp. 496-525). Oxford, UK: Oxford University Press.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2), 1-9.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173-186.
- Tims, M., Bakker, A. B., & Derks, D. (2015). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, 24(6), 914-928.
- Tims, M., Bakker, A. B., Derks, D., & Van Rhenen, W. (2013). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management*, 38(4) 427–454.
- Torrente, P., Salanova, M., Llorens, S., & Schaufeli, W. B. (2012). Teams make it work: How team work engagement mediates between social resources and performance in teams. *Psicothema*, 24(1), 106-112.
- Wellman, N., & Spreitzer, G. (2011). Crafting scholarly life: Strategies for creating meaning in academic careers. *Journal of Organizational Behavior*, 32(6), 927-931.
- Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. *Advances in Positive Organizational Psychology*, 1(1), 281-302.