



# Development and Identification of Psychometric Properties Work Engagement

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## Abstract

This research aims to develop an instrument of measuring *work engagement* in the company employees. The concept of *work engagement* used in developing a measuring instrument consists of three aspects: vigor, dedication and absorption. *Work engagement* scale was trialed online with 152 employees consisting of 72 males and 80 females. Data analysis was conducted using Aiken's V with ten (10) raters. The result of Aikens' V validity analysis resulted in value ranging between 0.6 and 0.95. The development of measuring instrument undertook reliability test using Cronbach's Alpha technique with score of 0.885. The item with discriminating power ranging between 0.249 and 0.642 was maintained as it did not affect the reliability of scale. The concept of *work engagement* used in this measuring instrument development was unidimensional. The scale developing process in this research used factor analysis with *Exploratory Factor Analysis* (EFA) approach. The result of factor analysis shows Barlett Test of Sphericity value of 1181,992 with  $p < 0.01$  meaning that there is no significant correlation between variables. The result of calculation with KMO of 0.864 indicates that the factor analysis can be continued. Based on the result of factor analysis obtained, the cumulative percentage is 50.385%. The scale's loading factor obtained from factor analysis using EFA ranges between 0.428 and 0.867. Eighteen (18) out of 39 items are said to be valid.

**Keywords:** Work Engagement; Psychometric; Measurement

## Introduction

In this modern era, a company is faced with many challenges in running its business. The company is required to be able to follow global competition current. It should be able to maintain the assets it has in order to be competitive in globally. One of important assets a company has is employees. The company views employee as an asset or capital to develop and to achieve the company's objective maximally [1]. Social change and acceleration rate in the society suppresses each of organizations to run their business nimbly and efficiently. Organization needs powerful resource to undertake adaptation process dynamically. Sustainable technology and

digital development triggers some changes in the working process. All employees are required to work flexibly and to utilize technology to achieve an efficient working process [2]. It requires the company to pay special attention to the employees. The company should keep providing comfort and ensure that the employees do their job as a joyful experience. Working comfort and pleasure will give the employees a sense of being engaged with their job and company.

Work engagement has become a developing topic of discussion as it has significant impact on organization. Work engagement is defined as a positive mind condition with the indicators of vigor, dedication and absorption. *Vigor*

component refers to high energy and persistence. *Dedication* leads to high concentration and active participation in organization. Absorption refers to full concentration and joyfulness in the working process. These three indicators affect positively the organization; thus, employing the engaged employees, the organization can improve individual performance not only at team level but also at unit and organization levels. This makes the employees with high engagement an asset to their organization [3]. Work engagement should be a factor to which the leader of organization should pay attention because the antecedent of work engagement is, among others, leadership. The employees feeling engaged dedicate fully to organization and complete their job vigorously. The employees are motivated more intrinsically and therefore more committed to the organization. An engaged employee has initiative to modify his/her job into the more effective one [4].

Work engagement is the main predictor of employee's success due to the presence of dedication by which the employees will be strong and will focus on working activity and thus show the better performance role. The engaged employees will open to new experience so that they tend to have initiative and innovation in completing the job. Likewise, the engaged employees will help other coworkers voluntarily, thus contributing to the improvement of team performance [5]. The engaged employees will be able to take better endeavor to complete the job becoming the main target of organization. The employees can find joy and enjoy the process in completing their job, thus capable of directing energy to complete the job independently [6].

Organizational change aiming to improve the effectiveness of working process often becomes stressor to the employees. The rapid change rate makes employees find uncertainty in their working process. However, the employees engaged in organization have adaptive advantage in dealing with uncertainty condition [2]. Work engagement is viewed a very valuable quality of employees in organizational environment. It is closely related to career progress because there is a process of improving working ability. It means that the organization investing in the improvement of employee engagement has predicted its organizational success. The engaged employees also tend to have low turnover intention so that they prefer staying in the organization. The employees with high engagement can motivate other coworkers to improve the effectiveness of working process. This condition implies that an organization encouraging the improvement of employee engagement is a mutually beneficial strategic decision (win-win solution) to both individual (employee) and organizational levels [7].

In Indonesia, the research studying work engagement has not been adjusted with Indonesian culture. The work

engagement studies in Indonesia often overlap with the concepts of employee engagement, job satisfaction and work related flow. This study attempts to investigate further the work engagement through developing a measuring instrument more compatible to Indonesian culture. This research aims to develop an instrument to measure work engagement of employees in a company to be able to distinguish the engaged employees from the non-engaged ones.

### Conceptual Definition of Work Engagement

Work engagement refers to a motivating satisfactory condition for the employees, characterized with high levels of physical and mental energy, enthusiasm, and dedication in working process, as well as full absorption in daily activities. In daily working process, the engaged employees are available to invest all of their efforts and time in working activity, thus contributing to the improved work quality. The employees with engagement in organization tend to complete their job more thoroughly. The indicators of work engagement are vigor, dedication, and absorption [8]. Furthermore, work engagement is a positive satisfactory mind condition, characterized with vigor, dedication, and absorption. Vigor is characterized with high energy level when an individual is working, an individual's persistence and consistency when finding the difficulty in the working process. Dedication is characterized with strong engagement in a job when an individual feels enthusiasm and challenged with each of working processes. Absorption is a condition in which employees concentrate fully on and are preoccupied with the job so that time passes quickly and it is difficult for them to break away from the job [1].

The concept of work engagement is defined as a positively motivating satisfactory condition to the employee wellbeing. Work engagement means that the employees can direct their personal resource when they are faced with more difficult work demand. The employees with work engagement can actively find resources that can make the work more effective and have better performance. Engagement enables the employees to exert effort better than that previously and to manage saturation potentially resulting from the working process [9].

An engaged employees have three characteristics: vigor, dedication, absorption. Vigor means that the employee invests some efforts in the job and keeps attempting to do the task completely. Dedication is enthusiasm and inspiration related to the job. Absorption is a condition when the employees feel time passing quickly during working so that they are preoccupied with the working process. This condition implies that the engaged employees have lower risk of being absent in the working process due to

personal matters. The employees are also more cautious in the working process needing full concentration, thus capable of improving occupational safety rate [10]. The concept of work engagement is a strategic orientation to the employees in organization. Employees rate the working situation to evaluate the extent to which the engagement can accommodate the aspiration in the workplace. It means that not only engagement occurs in the employees but also many employees find potential engagement as a career developing strategy [11].

Some studies have revealed that the engaged employees will be very energetic and independent. The positive attitude and the activity level of engaged employees will create positive feedback to themselves in the term of appreciation, recognition, and success. Although the engaged employees feel tired after working hard along day, they will represent the fatigue as a joyful condition. This condition means that fatigue is associated with positive achievement. Finally, the engaged employees will enjoy other activities beyond the job [12]. This condition makes the employees engaged with job have healthier mental condition. The engaged employees enjoy each of working processes done in the organization. the process makes the employee interprets the job better and thereby are willing to invest time and effort fully into the process of realizing the target of organization [13]. The engaged employees are different from the workaholic ones. The workaholics employees work hard because they perceived that there is no other choice and feel guilty if they do not work. The workaholic individual focuses on the job so they neglect other activities. It makes them manage their personal life difficultly and inadequately interact socially with their neighborhood. Meanwhile, the employees engaged with the organization focus strongly and participate actively in each of working process but they know the time limitation for the work. They remain to have other activities (personal life) beyond the organization. In contrast, the workaholic employees work very hard because they have no other choice. They have irresistible urge to work because when they do nothing, they will feel useless, nervous, anxious, and guilty [14].

In industrial world, the concept of *work engagement* is often viewed as a combination of three existing concept: job satisfaction, organizational commitment, and extra-role behavior. Furthermore, Zhang & Li explains that *work engagement* is different from job satisfaction as it combines high work pleasure (dedication) and high activity (power, absorption). Job satisfaction is a more passive form of employee wellbeing. Job satisfaction is the positive response of employees to the organization-related resources. It means that the employees refer to only the existing resource in the organization without attempting to have initiative

in working process in order to achieve job satisfaction [15]. Work engagement is different from organizational commitment concept. Organizational commitment is a condition where employees prefer to stay with their organization. Organizational commitment indicates the employees' attitude to the organization. The stronger the commitment, the higher the employee's wish to stay with the organization [16]. Furthermore, work engagement is different from extra-role behavior, a condition in which individuals are willing to complete the job beyond their basic workload. Extra-role means that the individuals do the job without being rewarded formally. Employees taking extra role can help other coworkers finding difficulty [17]. Schaufeli, et al. [18] explains that there are three aspects in *work engagement*:

### **Vigor**

Vigor is characterized with high energy level and mental resilience in the working process, a willingness to invest effort in an individual's job, and persistence in facing difficulty.

### **Dedication**

Dedication refers to strong participation in an individual's job, can inspire the job implementation, deals with any challenges in the job done, and grows pride of the job.

### **Absorption**

Absorption is characterized with full concentration and pleasure to complete the work. The pleasure feeling makes time passing quickly and an individual finds difficulty in breaking away from his/her job.

### **Operational Definition of Work Engagement**

Operational definition is a definition on variable formulated based on the observable characteristics of variables. Operational definition builds on how the corresponding variables work, what its dynamic characteristics are [19]. Work engagement is defined as a condition in which the employees enjoy and participates actively in the job done without feeling the workload in completing the work. Work engagement consists of three aspects:

- **Vigor**  
Vigor aspect is characterized with the high energy level, the spirit in completing the work. The vigorous employees will have resilience and persistence in the process of

completing the tasks assigned by the organization. In addition, the employees with high energy level will always be motivated to work.

- **Dedication**

*Dedication* is characterized with active participation in completing the work. The participation is indicated with enthusiasm in every working behavior featured by employees. The employees participating directly in their job will inspire other employees in working.

- **Absorption**

Absorption refers to concentration on and pleasure with the job undertaken. The pleasure feeling also makes employees preoccupied with completing the job, thereby feeling that time passes so quickly.

### Description of Measuring Instrument

The development of *work engagement* scale starts with studying the concept of *work engagement*. The development

of operational definition and the indicator of behavior based on an *open ended question* distributed online. The process of *open ended question* is also used as a means of seeing the potentially emerging new aspect. In addition, *open ended question* is conducted to see *work engagement* behavior existing in the field. The development of work engagement scale is using the response scaling format. *Work engagement* scale is developed using five types of choice constituting answer to the statement items.

The development of *work engagement* consists of three aspects: *vigor*, *dedication* and *absorption*. In loading process, vigor 40% load, dedication 30% and absorption aspects 30%. Vigor aspect gets the highest loading percentage because vigor aspect is the most dominant aspect and underlies other aspects. Vigor aspect also appears most frequently in the process of coding the open ended question related to the employees' work engagement. Table 1 shows the blueprint of work engagement scale and its loading.

Aspect	Indicator	Nos. of Item	Load
<i>Vigor</i>	High energy level	1,4,7,10UF*,13UF*	40%
	Resilience	16,19,22,25UF,28UF*	
	Consistency	30,32,34,36UF*,38UF	
<i>Dedication</i>	Responsibility	2,5,8,11UF*	30%
	Totality	14,17,20UF*,23UF*	
	Enthusiasm	26,29,31UF*,33UF*	
<i>Absorption</i>	Enjoying the job	3UF*,35,37,39UF*	30%
	Focusing on the job	6*,9*,12UF*,15UF*	
	Bond to the job	18,21*,24UF*,27UF*	
Total			100%

**Table 1:** Blueprint of work engagement scale.

Notes: UF: unfavorable item \*): removed item.

### Subject of Research

The subject of research consisted of men and women with the status of company employee currently. The criterion of subjects in this research is the employees working in the company with at least three-month tenure. The number of subject consists of 152 persons: 72 (47.4%) men and 80 (52.6%) women. The subjects were selected using purposive sampling method. The *purposive sampling* method is the one selecting a group of subject based on certain characteristics considered having close relation to the characteristics of population known previously [20].

### Result

#### Content Validity

The validation in psychological scale aims to prove that the structure measures all behavioral aspects, behavioral indicators and items, to create an accurate construct to the attribute measured. The item written correctly and compatibly to behavioral indicators that have been formulated correctly is the valid one. Item validity is indicated with the validity coefficient of item calculated based on the data of score [21]. The validity of *work engagement* scale was tested using Aiken's V content validity coefficient. Azwar [21]

explains that the validity is calculated using Aiken's V based on the result of expert panel assessment on n-persons over an item concerning the extent to which the item represents the measured construct. The range of numbers potentially results from the result of Aiken's V validity test is 0 and 1.00. Aiken's V content validity was conducted by ten students of the Master of Professional Psychology (Psychology of Industry and Organization) of UGM. The result of Aiken's V validity test shows the score ranging between 0.6 and 0.95. Considering the result of Aiken's V validity test, all items of work engagement scale are valid.

### Reliability and Discriminating Power of Items

The characteristic of high-quality measuring instrument is, among other, reliable, capable of producing precise score with small measurement error. The definition of reliability refers to the credibility or consistency of measurement output meaning how precise the measurement is Azwar [21]. The coefficient of reliability ranges between 0 and 1.00. The higher and the closer to 1.00 the coefficient of reliability, the more reliable is the measurement [21]. Reliability test was conducted on this scale using Cronbach's Alpha technique. The Cronbach's Alpha technique is used, according to Azwar [21], because the data used to estimate the coefficient of

reliability is obtained in one scale presentation only in a group of subjects. The estimated scale of work engagement shows that the Cronbach's Alpha reliability coefficient is 0.885.

The discriminating power of item is the extent to which an item can distinguish individuals or a group individuals with from those with no measured attributes [21]. Azwar [20] states that all items achieving a total item correlation coefficient of at least 0.30 are considered having satisfactory discriminating power so that the item with correlational coefficient below 0.30 will be removed. In this process, the function of scale trial also aims to find out the subject's response to the scale to reveal whether or not the subjects feel confused with the sentence used. Having undertaken item analysis test on work engagement, 21 out of 39 items are valid. Eighteen (18) items are removed because it has total item coefficient of correlation below 0.3. The correlational score of item ranges between 0.249 and 0.642. The items with discriminating power of 0.249 remain to be maintained because they do not affect the Cronbach's Alpha reliability value significantly. Table shows blueprint of work engagement scale following the removal.

Aspect	Indicator	Nos. of Item	Total
<i>Vigor</i>	High energy level	1,4,7	3 items
	Resilience	16,19,22,25UF	4 items
	Consistency	30,32,34, 38UF	4 items
<i>Dedication</i>	Responsibility	2,5,8,	3 items
	Totality	14,17	2 items
	Enthusiasm	26,29	2 items
<i>Absorption</i>	Enjoying the Job	35,37	2 items
	Focusing on the Job	-	-
	Bond to the Job	18	1 items
Total			21 items

**Table 2:** Blueprint of work engagement scale following the removal.

### Factors Analysis

Factor analysis was conducted on the subject consisting of 152 persons with SPSS version 21 help. The approach used was exploratory factor analysis (EFA). The exploratory factor analysis is used to simplify the measurement. EFA is used to explore the factor structure of a number of factors observed. The concept of work engagement used in this research was unidimensional. The variable is unidimensional meaning

that the theory concept has a single measuring domain [22].

The factor analysis conducted in this research aims to remove the items with loading factor below 0.40. The items with loading factor more than 0.4 is feasible to maintain [22]. The item with loading factor below 0.4 is not feasible to maintain [23]. In the factor analysis, the items with loading factor below 0.4 are items number 18, 19, and 30. Table 3 shows the item with loading factor higher than 0.4.

Aspect	Indicator	Nos. of Item	Total
Vigor	High energy level	1,4,7	3 items
	Resilience	16,19*,22,25UF	3 items
	Consistency	30*,32,34, 38UF	3 items
Dedication	Responsibility	2,5,8,	3 items
	Totality	14,17	2 items
	Enthusiasm	26,29	2 items
Absorption	Enjoying the Job	35,37	2 items
	Focusing on the Job	-	-
	Bond to the Job	18*	-
Total			18 items

**Table 3:** Blueprint of Work engagement Scale following EFA factor analysis.

Notes: \*) items with *loading factor* below 0.4.

The result of factor analysis shows Barlett Test of Sphericity score of 1181.992 with  $p < 0.01$  meaning that there is a significant correlation between variables. The result of KMO calculation with score of 0.864 indicates that the factor analysis can be continued. The result of factor analysis shows cumulative percentage of 50.385%. The cumulative percentage of 50.38% implies that the item can measure the employees' work engagement of 50.37 with error of 49.62%.

## Discussion

The *work engagement* developed has psychometric characteristics still needing improvement. The result of KMO calculation with score of 0.864 indicates that the subjects in the work engagement scale trial have been qualified for the standard of factor analysis. Furthermore, the cumulative percentage of 50,38% indicates that this scale can measure the employees' work engagement of 50.38%. The *work engagement* scale has high Alpha reliability value, 0.885. The analysis on the item's discriminating power found 18 items are removed as they have discriminating power below 0.3. The items are removed because the process of developing items is not compatible to the item writing principle. Azwar explains the principle of writing item as follows. Firstly, write the item using simple and understandable words and sentence. Secondly, choose non-ambiguous words or terms. Next, write items always based on the behavioral indicator. In writing item, consider the behavior to be revealed as well. The item written may not contain high social desirability. To avoid answer stereotype, some items are made favorable and some others unfavorable.

The items number 10 reading "*I feel tired easily in the office*" and number 13 reading "*I feel bored easily when I do monotonous tasks*" have discriminating power below 0.3 because the author assumes that both items cannot explain

the negation of the indicator of high energy level. The two items have ambiguous meaning; the word "easily" in both items makes the subject confused in responding to them. The item number 28 reading "*I prefer declining the job I think I cannot complete*" is removed because the sentence in the item is too long and elaborate and therefore makes the subject confused. The item is considered as incapable of measuring the construct of resilience in work engagement. The item number 36 reading "*I have felt satisfied with the job I undertake currently*" measures the concept of work engagement from the resilience indicator. The item number 36 does not represent the negation of resilience. The word "felt satisfied" is not the negation of resilience.

Item number 11 reading "*I delegate the task to my coworker if I cannot complete it*" has discriminating power below 0.3 as it is considered having overlapping meaning with the item number 28 reading "*I prefer declining the job I think I cannot complete*". Both items have the same essence, the delegation of task to others. The item number 11 measures the responsibility existing in the work engagement but not in the operational definition in the form of behavior often performed by the employees. Furthermore, the items number 20 and 23 are removed, belonging to the indicator of totality. The item number 20 reads "*I complete the tasks just the way they are according to my capability*", and number 23 reads "*I complete the task according to the capability*" so that they are overlapping.

In the indicator of enthusiasm, there are two items to the minimum standard specified". The two items have the same essence "completing the tasks according to the minimum standard specified". The two items have the same essence "completing the tasks according to the minimum standard specified", numbers 33 and 36. Item number 33 reading "*I am often retarded in acquiring information related to the company development*" and item number 36 reading "*I prefer saying nothing when I am in the office*" reflecting the negation of no

enthusiasm in working. Both items are ambiguous and not referring specifically to certain situation. The item number 3 reads *"The job I do now is a burden to me"*. Item number 39 reads *"I do the task assigned by my superior as the demand"*. The meanings of sentences in items number 3 and 39 are the same, the demand in working. These two items are overlapping as it operates the indicator of enjoying the job rather than being measured from the presence of demand in working only.

In the indicator "focusing the job, all items (nos. 6, 9, 12, and 15) are removed. Item number 6 reads *"I use handphone in the office only in relation to the job"*. This item is removed because the meaning of handphone use in the office done very often to support the job and thereby cannot measure the focus on the job. The sentence used in the item is also too long and elaborate. Item number 9 reading *"I do not access social media during office working hour"* is removed because accessing social media during office working hour can be the employee's job description. This item cannot be generalized into the employees operating in online sector. Item number 12 also has discriminating power below 0.3 *"I can be disturbed easily by my coworkers when I complete my task"*. This item is ambiguous because the word *disturbed* does not have specific meaning in the term of behavior so that the subject is confused in responding to the item. Item number 15 reads *"I often think many things during working hour"*. The word "often" in this item means that the behavior is performed continuously during working hour. It makes the subject confused in responding to the item. The word "often" can be corrected with "sometimes" meaning in certain situation only.

In the indicator of bond to the job, there are three items removal: items number 21, 24, and 27. The three items have discriminating power below 0.0 as they are assumed not to measure the construct of bond to the job. Items number 21 reading *"I take extra hour to complete the tasks assigned by my boss"* and number 24 reading *"I complete my task well to make my boss happy"* will be used more appropriately to measure an employee's responsibility. Taking extra hour and completing the task are the employees' responsibilities. Item number 27 reading *"I am responsible for the tasks assigned by my boss in the office only"* is more appropriate to be put into the indicator of totality as non-favorable item. Being responsible cannot measure the bind to the job. The indicator of bond to the job makes the subject confused in responding. The bind focuses more on the sense of belonging to the company so that the operationalization of behavior should be made clearer.

Considering the factor analysis, the items with loading factor below 0.4 are removed automatically. The items removed in the process of factor analysis are those number

30, 18, and 19. Item number 30 reads *"I make checklist related to the tasks to do"*. Item no. 30 measures the vigor aspect with the indicator of consistency in working. The item does not represent the consistency in working so that it is true that it has loading factor below 0.4. Item number 18 reads *"Time feels passing so quickly when I work"*. The item number 18 measures the absorption aspect with the indicator of bond to the job. The item does not reflect the employees' behavior of being bond to the job. The item is more appropriate to be mapped into the indicator of enjoying the job. The sentence in item number 18 means that the employees enjoy the job undertaken so that time feels passing so quickly. Furthermore, the item number 19 reads *"I feel satisfied with doing the task surpassing the standard specified"*. Item number 19 measures vigor aspect with the indicator of resilience in working. The sentence in the item does not reflect the resilience in working. The sentence "I feel satisfied" in the item number 19 has ambiguous meaning to the subject. The two items are removed because they cannot measure the aspects included. Following the analysis on the discriminating power of item and the factor analysis, out of 39 items 18 items remain. Loading factor ranges between 0.428 and 0.867. Item number 17 *"I do the task assigned at the same day"* has lowest loading factor, 0.428. Furthermore, item number 14 *"I look for various references to support the completion of task assigned by my boss"*. The item has good loading factor as it is assumed to be able to measure operationally the dedication aspect with totality indicator.

## Conclusion

Considering the result of KMO on work engagement scale with score of 0.864, it can be seen that the trial can be done with the subject using factor analysis. The work engagement scale is composed of three aspects: vigor with load of 40%, dedication with 30% and absorption with 30%, consisting of 39 items. The items been trialled with 152 employees working in some organizational sectors with 21 items considered to be valid. The process of exploratory factor analysis on the items of work engagement scale found 18 items that can be used by the organization. the work engagement scale developed has been adjusted with organizational and cultural context of Indonesia and thus it is more understandable.

This research has some limitations, particularly related to methodological aspect. In aiken validity analysis process, the raters were students who were studying in the master of professional education program and they scored high the item validity. It may occur because not all raters do understand the concept of work engagement completely; some of them know it based on the operational definition only. The raters rate based on sentence similarity and clarity in the items so that high score given to an item is assumed not actually valid. Thus, many items are removed in the trial

process. Furthermore, the sample used in this research was selected online. In completing online scale with many items, the subjects tend to respond to the items without reading comprehensively so that they tended to give safe answer or response.

## References

- Schaufel W (2021) Engaging Leadership: How to Promote Work Engagement. *Front Psychol* 12: 1-10.
- Den Heuvel MV, Demerouti E, Bakker AB, Hetland J, Schaufeli WB (2020) How do Employees Adapt to Organizational Change? The Role of Meaning-making and Work Engagement. *Span J Psycho l*: 1-16.
- Rahmadani VG, Schaufeli WB, Ivanova TY, Osin EN (2019) Basic psychological need satisfaction mediates the relationship between engaging leadership and work engagement: A cross-national study. *Human Resource Development Quarterly* 30(4): 453-471.
- Rahmadani VG, Schaufeli WB (2022) Engaging leadership and work engagement as moderated by "diuwongke": an Indonesian study. *International Journal of Human Resource Management* 33(7): 1267-1295.
- Bakker AB, Albrecht S (2018) Work engagement: current trends. *Career Development International* 23(1): 4-11.
- Van Tuin L, Schaufeli WB, Van den Broeck A, van Rhenen W (2020) A Corporate Purpose as an Antecedent to Employee Motivation and Work Engagement. *Front Psychol* 11: 572343.
- Robijn W, Euwema MC, Schaufeli WB, Deprez J (2020) Leaders, teams and work engagement: a basic needs perspective. *Career Development International* 25(4): 373-388.
- Bakker AB (2022) The social psychology of work engagement: state of the field. *Career Development International* 27(1): 36-53.
- Xanthopoulou D, Bakker AB (2021) Antecedents and consequences of work engagement: A multilevel nomological net. *A Research Agenda for Employee Engagement in a Changing World of Work*: 37-51.
- Hakanen JJ, Ropponen A, Schaufeli WB, De Witte H (2019) Who is Engaged at Work?: A Large-Scale Study in 30 European Countries. *J Occup Environ Med* 61(5): 373-381.
- Leiter M (2019) The psychology of work. *Occupational Health & Safety (Waco, Tex.)* 77(9): 145-147.
- Wang N, Zhu J, Dormann C, Song Z, Bakker AB (2020) The Daily Motivators: Positive Work Events, Psychological Needs Satisfaction, and Work Engagement. *Applied Psychology* 69(2): 508-537.
- Jiang Q, Lee H, Xu D (2020) Challenge Stressors, Work Engagement, and Affective Commitment among Chinese Public Servants. *Public Personnel Management* 49(4): 547-570.
- Di Stefano G, Gaudiino M (2019) Workaholism and work engagement: how are they similar? How are they different? A systematic review and meta-analysis. *European Journal of Work and Organizational Psychology* 28(3): 329-347.
- Ampofo ET (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.
- Liu E, Huang J (2019) Occupational self-efficacy, organizational commitment, and work engagement. *Social Behavior and Personality* 47(8).
- Giancaspro ML, Callea A, Manuti A (2022) I Like it like That": A Study on the Relationship between Psychological Capital, Work Engagement and Extra-Role Behavior. *Sustainability (Switzerland)*, 14(4).
- Martinez IM, Salanova M, Cruz-Ortiz V (2020) Our Boss is a Good Boss! Cross-level Effects of Transformational Leadership on Work Engagement in Service Jobs. *Revista de Psicologia Del Trabajo y de Las Organizaciones* 36(2): 87-94.
- Azwar S (2017) *Metode Penelitian Psikologi*. Pustaka Pelajar.
- Sugiyono (2018) *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. In Alfabeta (465).
- Azwar S (2016) *Penyusunan Skala Psikologi*. Pustaka Pelajar.
- Stevens KAP, JP (2016) *Applied Multivariate Statistics for the Social Sciences Analyses With Sas and Ibm'S Spss Sixth*. In *Journal of Physics A: Mathematical and Theoretical* 44(8).
- Field A (2017) *Discovering Statistics Using IBM SPSS Statistics*. 5<sup>th</sup> (Edn.), Sage, UK, 53(9): 1689-1699.

