

# Regression Model for Work Engagement of Millennial Generation Workforce

Rina Mulyati<sup>1</sup>, Fathul Himam<sup>1</sup>, Bagus Riyono<sup>1</sup>, Fendy Suhariadi<sup>2</sup>

<sup>1</sup> *Fakultas Psikologi Universitas Gadjah Mada Jogjakarta, Indonesia*

<sup>2</sup> *Fakultas Psikologi Universitas Airlangga Surabaya, Indonesia*

**Keywords:** Regression Model, Work Engagement, Meaningful Work, Millennial Generation Workforce

**Abstract:** There were lots of studies on person-job fit proved to promote meaningful work and work engagement, still there is no evidence about the role of meaningful work as mediator between person-job fit and work engagement for millennial generation workforce. The Millennials will dominate 50% of the workforce in 2020 and predicted to be increasing to 75% in 2025. The Millennial Generation has distinctive characteristics compared to those of previous generations (Baby Boomers and Generation X). They are easily quitting their job sometimes because they just wanted to. Therefore, management needs strategies to retain them and make them more engage in their work. Regression analysis with bootstrap method was used to investigate the hypothesis that meaningful work mediates the effect of person-job fit on work engagement. Respondents involved in this study were the employees (N= 47) from state-owned company (BUMN) with 5.4 years working experience in average ( $SD = 2.34$ ). Results indicated that person-job fit was a significant predictor for meaningful work whereas meaningful work plays as mediator between person-job fit and work engagement. To escalate work engagement for millennials, management need to create work design that promote fitness between workers and their jobs in order to make them experience meaningful work.

## 1 INTRODUCTION

The engagement into work for millennial workforce needs to get more serious attention because they will dominate 50% of the workforce in 2020 and predicted to be increasing to 75% in 2025. Number of studies show that the engagement of millennial generations into their work were the lowest compared to the previous generation (Abercombie, 2014; Chawla, Dokadia and Rai, 2017; Rigoni and Nelson, 2016). Data from Gallup shows only one-third of U.S. employees (and 15 percent worldwide) are actively engaged in their jobs. The number of millennial employees who feel strongly connected to their company's mission is similarly low (40%).

Work engagement has a positive impact on the individual's performance as well as for the organizations (Christian and Slaughter, 2011; Dalal, et al., 2012; Kim, Kolb and Kim, 2012; Robertson, Birch and Cooper, 2012; Singh and Karki, 2015; Yongxing, et al., 2017; Muslim and Suhariadi, 2018) and became the key to winning the competition in the 4<sup>th</sup> era of industrial revolution. It is not just

keeping people focused on their daily workload since engagement in the 21<sup>st</sup> century means there is a sense of connection with organizations' mission, of understanding of purpose, of contribution and the possibility to learn and develop. Technology, incentive, rewards or Workforce Optimization (a business strategy that integrates contact centre technologies for customer experience to promote operational efficiency) are no longer the key to be more productive in work. It is more important that employees have strong connection with their job, with their colleagues and with the business as a whole (Evaluagent, n.d.). When employees fully connected with their company's mission and with senior leaders and also direct managers, they are more likely to be engaged and companies with engaged employees outperform those without by up to 202 percent—even in a volatile marketplace (Waite, 2018)

Organizations need to put work engagement within employees into priority since its absence becomes the root of the problem in the employees' commitment and motivation (Aktouf, 1992). Bakker

and Oerlemans (2011) propose work engagement as a positive form of work-related subjective well-being to explain how workers perceive and find their work as stimulating and energizing, interesting and also challenging so they devote their time in a significant and meaningful effort. They are happy with their work and compare to unhappy employees, they are productive (Lyubomirsky, King and Diener, 2005), more active, more enthusiastic about work, and more persistent in the face of adversity (Bakker and Oerlemans, 2011).

Nielsen (2013) suggests organizations to change "top-down" work redesign approach in which management focused on optimizing job demands and resources to create success into individualized approach, that is taking each individual as an active creator for own work and considering the flexibility in adjusting with own working environment. Gordon et al., (2018), Tims, Bakker and Derks, (2015) found that an individualized work redesign approach shown to significantly improve employee well-being at work such as work engagement and performance. Other factors that contributes to employees' work engagement are organizational support, emotional labour, management by objectives and quality of life (Septiyani and Himam, 2013; Utomo, Riyono and Budiharto, 2017; Purboarum and Riyono, 2017) and in turn, work engagement significantly becomes mediating variable for employees' performance (Muslim and Suhariadi, 2018).

The ability to organize work has an important implication on individual psychological health and happiness since work can serve as resources for survival, access to relational connections, and experience in gaining control over life (Blustein, 2008). Having employee with enthusiastic and meaningful work experience, fundamentally and significantly contribute to organization success (Steger, Dik and Duffy, 2012) therefore can be basis for management to create work design that promote motivating and meaningful working experience (Humphrey, Nahrgang and Morgeson, 2007)

Employees develop engagement at work when they find a sense of meaning related to work, have capability to express ideas and opinions freely and easy access to work resources. Interpersonal factors as a contextual characteristic, serve as media in creating psychological meaning, security, and availability for employees so they will be more engaged in their work (Kahn, 1990). Meaningful work is one's subjective experience about work which then creating the feeling of significance, facilitating personal growth, and contributing to the

greater good (Allan, Autin and Duffy, 2016). Furthermore, meaningful work represent the discovery of existential meaning from experiencing positive emotions, finding meaning from work, and attaining goals at workplace (Lee, 2015) and as result one can find meaning of his/her work when there's coherence between the characteristics one pursues and the attributes he/she identifies at work. (Bendassolli, et al. Torres, 2015).

Employees today are likely to have belief that working is not only a matter of obtaining financial security but also accomplishing social and psychological needs (Rosso, Dekas, and Wrzesniewski, 2010). It is important for employees to acquire the fitness between the value at work and their personal beliefs, since it is a key aspect to psychological significance and the fulfillment of needs and desires appears to be an important mechanism in developing meaningful work (Rosso et al., 2010). Meaningful work will increase when employees perceive a match between self and the job (person-job fit). This is in line with the current notion about employees as an active agent at their work as they are not only to pursue their personal desires but also to deliver a meaningful contribution which in turn produce positive impact on organization (Arnold et al., 2007; Steger et al., 2012).

Person-job fit (P-J Fit) is one of four elements of the person-environment fit (P-E Fit) concept, a framework in understanding human attitudes and behaviors in organization setting (Kristof-brown, Zimmermann and Johnson, 2005). P-E fit means congruence, similarity, correspondence between people and its environment (Edwards and Shipp, 2007), the condition of which can create positive impact individually as well as organizationally (Edwards and Shipp, 2007). Kristof (1996) defines P-J fit as compatibility between individuals with certain jobs. Edward (1991) specifically proposes as the fitness between the abilities of a person and the demands of a job (i.e., demands-abilities) and the desires of a person and the attributes of a job (needs-supplies). Demands-abilities (D-A) fit refers to capabilities the person has to meet job demands which include knowledge, skills, abilities and other characteristics. Need-supplies (N-S) fit means the preferences and needs of individuals can be supported by their work that dimensions of interests and job characteristics as part of it. (Cable and DeRue, 2002; Cable and Judge, 1996; Chuang, Shen, and Judge, 2016).

Lewis and Yeoman (2016) also argued that the millennials workforce considered achieving

organizational goals are far more important than reaching financial objectives only—they see financial success as a consequences of implementation the right organisational goals and people policies. The concept of organisational purpose is the centre of the heart of much millennial thinking. Personal development has a great impact in motivating millennial in the workplace far more than for older generations so it supports the explanation why personal developments are not as effective as motivator with each successive age group. Although there are resemblances in the responses across the generations but the millennial workforce stresses more for the environment which provide more freedom to express ideas and to feel safe doing it, to have “voice” and the ability to induce decision making. An employee-owned business is mostly the kind of businesses which millennials fit in since they are more likely to stay with their organisation for over two years.

Some people are more possible to experience meaningful work solely because they holds certain personality traits (Lips-Wiersma, 2002; Wrzesniewski, et al., 1997), but there are also others factors such as job design, opportunities to interact with others while working and jobs characteristics which provide challenge, autonomy, and significant tasks influence the meaningfulness of work. For the most part, it is important for the present study to identify person–job fit as an antecedent of meaningful work. At the time work is consistent with the self-concepts and/or identities employees hold (i.e., person–job fit), the job is likely to be meaningful. May, Gilson, and Harter (2004) supports the idea that an encountered fit between the person and the job is positively connected to meaningfulness since individuals who experience suitability are able to express their values and beliefs in their work (Kira and Balkin, 2014). In sum, meaningful work can be found at the workplace by ensuring alignment between an individual's competencies, values and purpose and the job (Chalofsky, 2003). It can be concluded that essential in the existence of meaningful work is the development of person–job fit (Scroggins, 2008).

Shamir (1991) claims that meaningful work is associated with various positive work attitudes and behaviours, including work motivation and the willingness to put time and effort into the job. When meaningful work influences motivation and time spent performing job tasks, then there must be a connection between meaningful work and job performance. If work is encountered as meaningful, then individuals should be fascinated to it and be

enthusiastic to put more time and effort into their work. Empirical research implies that individuals who experience work as meaningful have higher levels of job involvement and spend more time absorbed in their work (Wrzesniewski 2003). Certainly, individuals will take higher emphasis and significance on things that they believe as valuable and those things in which they find meaning. This is likely to have positive effects on job performance. Empirical evidences (Maslach and Leiter, 2008; Shuck, Reio, and Rocco, 2011) indicate the positive correlation between person-job fit and work engagement which means workers who perceive they have high level of P-J fit certainly show eagerness in accomplishing their works enthusiastically and they are likely engaged more with their work. Cai, et al. (2018) and Enwereuzor, Ugwu, and Eze (2016) also found significantly strong positive correlation between person-job fit and work engagement.

Anitha and Aruna (2016) explored contributing factors for work engagement in Indian millennial workers. Natural work style which characterized with every personnel adapts with other people style of work play a significant role for work engagement. Individual has an opportunity to work in their own way in which create fitness between personal attributes and job features.

So then, it can be concluded that millennial workers will find meaningful work when they feel there are match between self and their works which in turn lead to work engagement. The hypothesis is meaningful work serves as mediator between person-job fit and work engagement in millennial workforce.

## 2 METHODS

### 2.1 Respondents and Procedures

Using quantitative design, this research involved 47 millennial respondents from a state-owned enterprise in Surabaya Indonesia with 5.32 (SD = 2.40) years of work experiences in average. They were born between 1981-1993 with 29,4 years in age (SD=3,54), 51.06% were male and 63.83% were married. The educational level of subjects varied as follows: 23.40% were master degree, 59.57% undergraduate, 12.77% diploma and 4.26% were reported having a 2-year associate's degree.

For the instruments, we use questionnaires in which we administered back translation from original version in English into Indonesian and vice

versa. Regression analyses with bootstrapping method were utilized to examine the data.

## 2.2 Instruments

### 2.2.1 Work Engagement

Work engagement of the employee was assessed using *Utrecht Work Engagement Scale-9* (UWES-9; Schaufeli et al., 2006) which was the short version of UWES-17. It has only 9 items to assess Vigor (eg. ‘At my work, I feel that I am bursting with energy, translated into ‘Saya memiliki semangat yang meluap-luap saat bekerja, dedication (eg. I am proud of the work that I do, translated into ‘Saya bangga dengan pekerjaan yang saya lakukan’ and absorption (eg. ‘I am immersed in my work’ which translated into ‘Saya larut dalam pekerjaan saya’). The responses were a 7-point Likert scale range from 0 (never) to 6 (always) and the total scores reflect the level of work engagement within respondent. The higher the score the more engaged they become and vice versa. In the present study, the Cronbach alpha coefficient for the UWES-9 was 0.868.

### 2.2.2 Meaningful Work

Adapted from *Comprehensive Meaningful Work Scale* (CMWS; Lips-Wiersma and Wright, 2012) with 6 dimensions, 28 items and use a 5-point Likert scale. The dimensions are: Unity with others (eg. ‘Saya mempunyai rasa kepemilikan, translated from ‘I have a sense of belonging’, Serving others (eg. ‘Saya merasa betul-betul membantu klien atau pelanggan’ translated into ‘I feel I truly help our customers/clients’), Expressing full potential (eg. ‘I create and apply new ideas or concepts’, translated into ‘Saya menciptakan dan mengaplikasikan gagasan atau konsep yang baru’), Expressing full potential (eg. Saya menciptakan dan mengaplikasikan gagasan atau konsep yang baru. translated from ‘I create and apply new ideas or concepts’), Developing and becoming self (eg. ‘I don't like who I am becoming at work (reverse scored), translated into ‘Di tempat kerja, perasaan saya akan apa yang benar dan salah tidak jelas’), Reality (eg. ‘Di tempat kerja, kami berhadapan dengan realitas, translated from ‘At work we face up to reality’), Inspiration (eg. ‘I feel inspired at work, translated into ‘Saya merasa terinspirasi saat bekerja’) and Balancing tensions (eg. ‘Saya memiliki keseimbangan antara kebutuhan orang lain dan kebutuhan saya sendiri’ translated from ‘I have a good balance between the needs of others and my

own needs’). Cronbach alpha coefficient for the present study was 0.917

### 2.2.3 Person-Job Fit

We used the four-item Person-Job Fit measure which was a subscale from Perceived Person-Environment Fit (PJFS; Chuang, Shen, and Judge, 2016). It assesses individual subjective evaluation related to level of compatibility between job demands and individual abilities. Ratings were completed using a 7-point Likert scale which ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item was, ‘How would you describe the match between your professional skills, knowledge, and abilities and those required by the job?’ which then translated into ‘Bagaimanakah anda menggambarkan kesesuaian antara keterampilan, pengetahuan dan kemampuan profesional Anda dengan yang dipersyaratkan oleh pekerjaan?’ In the present study, the Cronbach alpha coefficient for the PJF was 0.881.

## 2.3 Data Analysis

Data were analysed using regression technique to examine the effect of person-job fit to work engagement via meaningful work. Widhiharso (2010) suggests that regression model used to investigate whether independent (predictor) variable were able to explain the variances within dependent (criterion) variable. Moreover, the word variance can be altered with prediction, influence or function of elevation or depletion. Using regression analysis model, beside the information about what can predict score variation, also it has the capability to explain the power of variation itself.

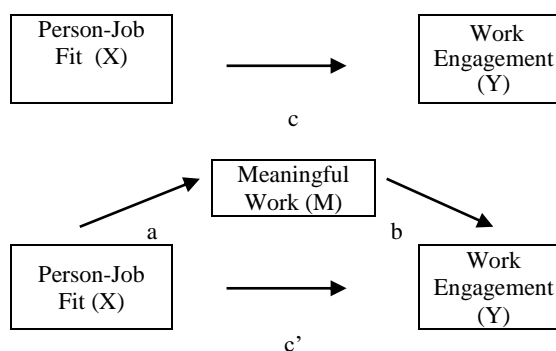


Figure 1: Regression analysis model.

Regression model with meaningful work as mediator (M) explain that Person-Job Fit (X) predict meaningful work and meaningful work itself

explain work engagement (Y). The variance of meaningful work (M) can be described by Person-Job Fit (X) and also the variance in work engagement (Y) can be clarified by meaningful work (M). Complete mediation happened when the predictor (X) did not explain the variance in the criterion (Y) but the mediator did. Moreover, the variable can operate as mediator when the scope of variation take predictor as well as criterion into account (Widhiharso, 2010).

Figure 1 demonstrates simple mediation with one mediator. It shows that the outcome of X divided into indirect (via M; path a-b) and direct effect to Y (path c'). The c path is direct predictive value of X to Y without controlling M to Y whereas c' path explain the predictive value of X to Y using M to Y as control. There are 3 effect in regression model with mediator in which every effect shows the role (in predictive function) among variables: Direct effect (c path), indirect effect (multiplication of a and b path), and total effect (c' path, obtained by adding c' and ab).

### 3 RESULT

#### 3.1 Demographic Profile

Table 1. shows demographic information on gender, year of birth, educational level, marital status, and working experience in years.

Table 1: Demographic profile.

Profile	Groups	%
Gender	Male	51,06%
	Female	48,94%
Marital Status	Married	63,83%
	Single	34,04%
	Other	2,13%
Educational Level	Diploma	12,77%
	Undergraduate	59,57%
	Professional	4,26%
	Master	23,40%
Year of Birth	80 – 85	21,28%
	86 – 90	40,43%
	91 – 95	38,30%
Working Experience	≤ 5 years	46,81%
	> 5 years	53,19%

#### 3.2 Descriptive Statistics

Using percentile to categorize the work engagement level into 5 groups. Table 2 shows the description of respondents' work engagement for each level.

Table 2: Grouping of respondents' work engagement.

Level	Percentages		
	Male	Female	Total
X < P20	12,77%	4,26%	17,02%
P20 ≤ X < P40	6,38%	12,77%	19,15%
P40 ≤ X < P60	6,38%	12,77%	19,15%
P60 ≤ X ≤ P80	14,89%	10,64%	25,53%
X > P80	10,64%	8,51%	19,15%
Total	51,06%	48,94%	100,00%

Overall, the respondents' level of work engagement was between percentile 40 and 60, that means at moderate category (mean=4.61, SD=77,24). Interesting finding from the descriptive data those were less than 20% of millennial workers were above percentile 80 in work engagement, and the highest percentage for a very low and a high level of work engagement were male respondents.

#### 3.3 Measurement Model

The hypothesis states that meaningful work serves as mediator between person-job fit and work engagement in millennial workforce was tested using bootstrapping procedures simultaneously as suggested by Preacher and Hayes with the PROCESS macro in SPSS (Hayes, 2013; Preacher and Hayes, 2008). To prevent trouble of non-normality in sampling distribution, we use bootstrapping method (Preacher and Hayes, 2008). It recommends that a mediation effect happens when the product of the paths between the independent variable and the mediator (path a) and between the mediator and the dependent variable (path b) is statistically significant. Further, the indirect effect of the independent variable should be significant (i.e., zero does not occur between LL and UL) through a bootstrapping test.

The result suggest that his model significantly can explain 23% of the variance ( $R^2 = 0,23$ ,  $F(2,44) = 6.54$ ,  $p < 0,001$ ). The bootstrapping result in table 2 and also in figure 2 shows (a) person-job fit predicts meaningful work positively ( $\beta = .19$ ,  $SE = .06$ ,  $p < .001$ ); (b) meaningful work serves as predictor for work engagement ( $\beta = 1.05$ ,  $SE = 0,39$ ,  $p = 0.01$ ) and (c') person-job fit cannot directly

predict work engagement ( $\beta = 0,17, SE = 0,17, p = 0,32$ ). Indirect effect in person-job fit to work engagement through meaningful work ( $\beta = .17, SE = .07, 95\% CI = .05, .33$ ) and Total effect =  $c' +$  Indirect effect ( $\beta = 0,37, SE = 0,17, p = 0,03$ ) were significantly positive.

Overall, the attempt to predict work engagement via person-job fit cannot be done directly. It should be passing through meaningful work. Even one can have high level of fitness with his/her job, but when the job itself cannot provide a sense of meaning, then there will not be any guarantee that one will highly engaged into his/her work.

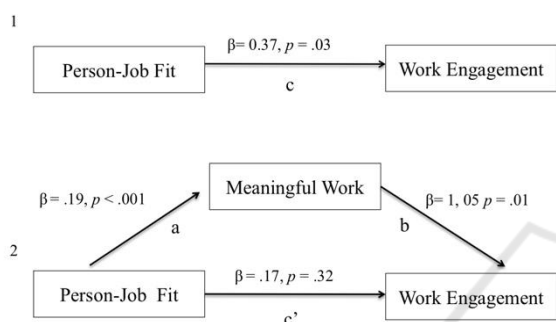


Figure 2: Result of regression model.

#### 4 DISCUSSION

The role of meaningful work as mediator between person-job fit and work engagement has empirical evidence in this study. Specifically, the hypothesis that stated there were positive relation between person-job fit and work engagement in millennial workforce with meaningful work as mediator was accepted (see Figure 2). The present study verified a positive direct relation between person-job fit and work engagement, and a positive indirect relation where person-job fit has a positive relation with work engagement through meaningful work. In sum, this study increases our understanding of the meaningful work and work engagement relationships and highlights the importance of experiencing meaningful work within organizations.

This research expands our comprehension about the connection between person-job fit and work engagement. This study contributes to the growing body of research on person-job fit by testing how person-job fit can shift employee perception about meaning of work and advance previous research on person-job fit and work engagement (De Beer, Rothmann and Mostert, 2016; De Beer, Tims and Bakker, 2016; Lu, et al., 2014), by investigating more the role through which person-job fit influence work engagement. Person-job fit leads how

employee thinks, behaves and in the end, engages into his/her work. The finding of this study increases our understanding further about the direction of the person-job fit and meaningful work relationship and also person-job fit served more as predictor for meaningful work as opposed to meaningful work as predictor for person-job fit. This research reveals that person-job fit is more of a precondition of work engagement, via meaningful work.

The contribution of this study on meaningful work literature showed that employees' meaningful work mediates the relationship between person-job fit and work engagement. It provides insights about mediating role of meaningful work into the relations between person-job fit and meaningful work and offers new ways to promote work engagement via meaningful work by focusing on person-job fit. Meaningful work is a function of the interaction between work tasks, the context in which the work is performed, and the individual's self-concept. When job tasks are in line with the individual's self-concept, the individual will experience the work as meaningful. Experienced meaningfulness of work has motivating capacity and is related to increased levels of work motivation that underlies numerous work behaviours such as work engagement.

Furthermore, Kahn (1990) explicitly stated that psychological meaningfulness as well as psychological safety and psychological availability are preconditioned for work engagement. Moreover, Kahn and Heapy (2014) explain how deepened purposes has great impact in workers' engagement. Other studies (May, Gilson, and Harter, 2004; Rothmann and Buys, 2011; Rothmann and Rothmann Jr, 2010) revealed how psychological meaningfulness significantly predict work engagement.

An insight about a source of meaningful work also found in this study and it can be used to provide direction for the establishment of meaningful work through the functions of human resource management such as selection, career planning, and job design. The implication for the applicant stage is that meaningful work can be created through the selection and placement of applicants whose self-concept matches the tasks of the job. For current employees, the experiences of meaningful work might be created through career planning activities that prepare employees to follow career paths consistent with their sense of self or via the design of the job to generate consistency between the work performed with the individual self-concept.

Some propositions can be derived from the result of this study about models of employee work engagement for millennial generation workforce. It recommends the current models of turnover may need additional variable in which person-job fit

variables to be included in work engagement models. There has been claimed that the engagement of employees into their work because there is fitness between self-concept with the job fit and they experience meaningful work. Since meaningful work is highly related to the chances of forming work engagement, so it is important for human resource professionals to design work that can generate meaningful work for employees. A method that can facilitate the development of meaningful work in employees is using the concept of perceptual fit in general and self-concept-job fit specifically. Organizations can attempt to increase levels of meaningful work among employees by matching job tasks with individual self-concepts.

This study stressed on intrinsic factors such as perceived fit and meaningful work that motivate individuals to engage into his/her work. Individuals' engagement with the organization because they feel fit with and experience meaning through the performance of job tasks. The addition person-job fit and meaningful work in models of work engagement for millennial generation workforce may validate work engagement theories and provide a more complete assessment of the work engagement process. An attempt to create good person-job fit, the management needs to consider the degree that job tasks and behaviors fit an individual's self-concept. The failure to do so may cause the flop to properly manage and facilitate the development of desirable job attitudes and behaviors, especially motivation to engage fully at work.

The limitation of this research concern the study design. Cross-sectional and non-experimental design cannot prove causality between the constructs under study. To determine this causality, future studies should try to replicate this study using longitudinal or diary research designs and to explore and better understand this longitudinal relation. In relation to variables, some suggestion for future research: First, focusing on factors that facilitate or hinder the proposed meaningful work and work engagement relationship and also examine moderators or underlying mechanisms that may play a role in better understanding these relationships such as including basic need satisfaction as a mechanism through which job crafting may lead to needs-supplies fit (Van Den Broeck, et al., 2008). Secondly, future research may focus on factors that facilitate or hinder the proposed meaningful work and work engagement relationship such as personal characteristics (e.g. self-efficacy) or organizational characteristics (e.g. person-organization value fit) that might be critical in the relationship. Third, future research on the number of samples needs to be added so that the study has adequate sample size and increases in statistical power.

In conclusion, this study contributes more explanation about mediating role of meaningful work on positive relation between person-job fit and work engagement for millennial workforce.

## ACKNOWLEDGEMENTS

We thank all respondents and also my warmest gratitude for my dear colleague Mr. Irwan Kurniawan for supporting the process along the way.

## REFERENCES

- Abercrombie, B. A., 2014. *Multigenerational workforce satisfaction: Relationship between generational cohorts and employee engagement*. Oklahoma State University. Available at: <[https://shareok.org/bitstream/handle/11244/14675/Abercrombie\\_okstate\\_0664D\\_13467.pdf?sequence=1](https://shareok.org/bitstream/handle/11244/14675/Abercrombie_okstate_0664D_13467.pdf?sequence=1)> [accessed June 9 2018]
- Aktouf, O., 1992. Management and theories of organizations in the 1990's: toward a critical radical humanism? *Academy of Management Review*, [e-journal] 17 (3), pp.407-431. <https://doi.org/10.5465/AMR.1992.4281975>
- Allan, B. A., Autin, K. L. and Duffy, R. D., 2016. Self-determination and meaningful work: Exploring socioeconomic constraints. *Frontiers in Psychology*, [e-journal] 7, pp.71. <https://doi.org/10.3389/fpsyg.2016.00071>
- Anitha, J. and Aruna, M. 2016. Enablers of employee engagement of Gen Y at the workplace with reference to automobile sector. *Amity Journal of Training and Development*, 1(1), 93-108. Available at: <<http://amity.edu/UserFiles/admaa/248Paper7.pdf>> [accessed 12 June 2018]
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K. and McKee, M. C., 2007. Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, [e-journal] 12(3), pp.193-203. <https://doi.org/10.1037/1076-8998.12.3.193>
- Bakker, A. B. and Oerlemans, W. G. M., 2011. Subjective well-being in organizations. In G. M. Spreitzer K. S. Cameron (Eds.), *The Oxford Handbook of Positive Organizational Scholarship*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199734610.013.0014>
- Bendassolli, P. F., Borges-Andrade, J. E. and Alves,

- J. S. C., Torres, T., 2015. Meaningful Work Scale in creative industries: A confirmatory factor analysis. *Psico-USF*, [e-journal] 20(1), pp.1–12. <https://doi.org/10.1590/1413-82712015200101>
- Blustein, D. L., 2008. The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist*, [e-journal] 63(4), pp.228–240. <https://doi.org/10.1037/0003-066X.63.4.228>
- Cable, D. M. and DeRue, D. S., 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, [e-journal] 87(5), pp.875–884. <https://doi.org/10.1037//0021-9010.87.5.875>
- Cable, D. M. and Judge, T. A., 1996. Person-organization fit, job choice, and organization entry. *Organizational Behavior and Human Decision Processes*, [e-journal] 67(3), pp.204–213. <https://doi.org/10.1006/obhd.1996.0081>
- Cai, D., Cai, Y., Sun, Y. and Ma, J. 2018. Linking empowering leadership and employee work engagement: The effects of person-job fit, person-group fit, and proactive personality. *Frontiers in Psychology*, [e-journal] 9, 1304. <https://doi.org/10.3389/fpsyg.2018.01304>
- Chalofsky, N., 2003. An emerging construct for meaningful work. *Human Resource Development International*, [e-journal] 6(1), pp.69–83. <https://doi.org/10.1080/1367886022000016785>
- Chawla, D., Dokadia, A. and Rai, S., 2017. Multigenerational differences in career preferences, reward preferences and work engagement among Indian employees. *Global Business Review*, [e-journal] 18(1), pp.181–197. <https://doi.org/10.1177/0972150916666964>
- Christian, M. S. and Slaughter, J., 2011. Work engagement: A meta-analytic review and directions for research in an emerging area. *Personnel Psychology*, [e-journal] 64, pp.89–136. <https://doi.org/10.5465/AMBPP.2007.26536346>
- Chuang, A., Shen, C. T. and Judge, T. A., 2016. Development of a multidimensional instrument of person-environment fit: The Perceived Person-Environment Fit Scale (PPEFS). *Applied Psychology*, [e-journal] 65(1), pp.66–98. <https://doi.org/10.1111/apps.12036>
- Dalal, R. S., Baysinger, M., Brummel, B. J. and Lebreton, J. M., 2012. The relative importance of employee engagement, other job attitudes, and trait affect as predictors of job performance. *Journal of Applied Social Psychology*, [e-journal] 42 (SUPPL. 1), pp.295–325. <https://doi.org/10.1111/j.1559-1816.2012.01017.x>
- De Beer, L. T., Rothmann, S. and Mostert, K., 2016. The bidirectional relationship between person-job fit and work engagement. *Journal of Personnel Psychology*, [e-journal] 15(1), pp.4–14. <https://doi.org/10.1027/1866-5888/a000143>
- De Beer, L. T., Tims, M. and Bakker, A. B., 2016. Job crafting and its impact on work engagement and job satisfaction in mining and manufacturing. *SAJEMS NS*, 19(3), pp.400–412. <https://doi.org/10.17159/2222-3436/2016/v19n3a7>
- Edwards, J. R., 1991. Person-job fit: A conceptual integration, literature review, and methodological critique. *International Review of Industrial and Organizational Psychology*, 1991, Vol. 6.
- Edwards, J. R. and Shipp, A. J., 2007. Relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff T. A. Judge (Eds.), *Perspective on organizational fit* (pp. 209–258). Jossey-Bass. <http://public.kenan-flagler.unc.edu/faculty/edwardsj/edwardsshipp2007.pdf>
- Enwereuzor, I. K., Ugwu, L. I. and Eze, O. A. 2016. How transformational leadership influences work engagement among nurses: Does person-job fit matter? *Western Journal of Nursing Research*, [e-journal] 40(3), pp.346–366. <https://doi.org/10.1177/0193945916682449>
- Evaluagent. (n.d.). *Cx and the fourth industrial revolution: A manifesto for implementing workforce engagement management to meet the challenges faced by the 21st-century contact centre*. Available at: <[https://cdn2.hubspot.net/hubfs/755928/documents/Implementing Workforce Engagement Management by EvaluAgent.pdf](https://cdn2.hubspot.net/hubfs/755928/documents/Implementing%20Workforce%20Engagement%20Management%20by%20EvaluAgent.pdf)> [accessed 21 May 2018]
- Gordon, H. J., Demerouti, E., Le Blanc, P. M., Bakker, A. B., Bipp, T. and Verhagen, M. A. M. T., 2018. Individual job redesign: Job crafting interventions in healthcare. *Journal of Vocational Behavior*, [e-journal] 104, pp.98–114. <https://doi.org/10.1016/j.jvb.2017.07.002>
- Hayes, A. F., 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: The Guilford Press, doi: 10.1111/jedm.12050
- Humphrey, S. E., Nahrgang, J. D. and Morgeson, F. P., 2007. Integrating motivational, social, and



- contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, [e-journal] 92(5), pp.1332–1356. <https://doi.org/10.1037/0021-9010.92.5.1332>
- Kahn, W. A., 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), pp.692–724. Available at: <[https://engagementresearch.wikispaces.com/file/view/Kahn+\(1990\)\\_Psychological+conditions+of+personal+engagement+and+disengagement+at+work.pdf](https://engagementresearch.wikispaces.com/file/view/Kahn+(1990)_Psychological+conditions+of+personal+engagement+and+disengagement+at+work.pdf)> [Accessed 17 June 2018]
- Kahn, W. and Heapy, E.D. 2014. Relational contexts of personal engagement at work. In C. Truss, R. Delbridge, E. Soane, K. Alfes, A. Shantz (eds.) *Employee engagement in theory and practice* (pp. 163- 179). Abingdon: Routledge.
- Kim, W., Kolb, J. A. and Kim, T., 2012. The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3), pp.248–276. <https://doi.org/10.1177/1534484312461635>
- Kira, M. and Balkin, D. B., 2014. Interactions between work and identities: Thriving, withering, or redefining the self? *Human Resource Management Review*, 24(2), pp.131–143. <https://doi.org/10.1016/J.HRMR.2013.10.001>
- Kristof-brown, A. L., Zimmerman, R. D. and Johnson, H. B., 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58, 281–342. Available at: <[http://www.psychologie.uni-mannheim.de/cip/tut/seminare\\_wittmann/meta\\_fr\\_ibourg/sources/Meta\\_person\\_job\\_fit.pdf](http://www.psychologie.uni-mannheim.de/cip/tut/seminare_wittmann/meta_fr_ibourg/sources/Meta_person_job_fit.pdf)> [Accessed 3 February 2018]
- Kristof, A. L., 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), pp.1–49. <https://doi.org/10.1111/j.1744-6570.1996.tb01790.x>
- Lee, S., 2015. A concept analysis of “meaning in work” and its implications for nursing. *Journal of Advanced Nursing*, [e-journal] 71(10), pp.2258–2267. <https://doi.org/10.1111/jan.12695>
- Lewis, P. N. and Yeoman, R., 2016. *Busting the millennial myth - the power of purpose: An inquiry into the millennial generation's attitude towards working in employee-owned businesses and how they can prosper in millennials' hands*. Available at: <[http://www.fieldfisher.com/media/4948679/eo-millennia\\_web.pdf](http://www.fieldfisher.com/media/4948679/eo-millennia_web.pdf)> [accessed 3 March 2018]
- Lips-Wiersma, M., 2002. The influence of spiritual “meaning-making” on career behavior. *Journal of Management Development*, [e-journal] 21(7), pp.497–520. <https://doi.org/10.1108/02621710210434638>
- Lips-Wiersma, M. and Wright, S., 2012. Measuring the meaning of meaningful work: Development and validation of the Comprehensive Meaningful Work Scale (CMWS). *Group and Organization Management*, [e-journal] 37(5), pp.655–685. <https://doi.org/10.1177/1059601112461578>
- Lu, C., Wang, H.-J., Lu, J., Du, D. and Bakker, A. B., 2014. Does work engagement increase person-job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior*, 84, [e-journal] pp.142–152. <https://doi.org/10.1016/j.jvb.2013.12.004>
- Lyubomirsky, S., King, L. and Diener, E., 2005. The benefits of frequent positive affect: Does happiness lead to success? *Psychology Bulletin*, 131(6), pp.803–855. <https://doi.org/10.1037/0033-2909.131.6.803>
- Maslach, C. and Leiter, M. P., 2008. Early predictors of job burnout and engagement. *Journal of Applied Psychology*, [e-journal] 93(3), pp.498–512. <https://doi.org/10.1037/0021-9010.93.3.498>
- May, D. R., Gilson, R. L. and Harter, L. M., 2004. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, [e-journal] 77, 11–37. Available at: [www.bps.org.uk](http://www.bps.org.uk)
- Muslim, M., Suhariadi, F., Damayanti, N.A. and Purnomo, W., 2018. The performance of medical laboratory technician based on situation awareness and psychological capital with the work engagement mediation. *Indian Journal of Public Health Research and Development*. [e-journal] 9(1), pp. 199-202
- Nielsen, K., 2013. How can we make organizational interventions work? Employees and line managers as actively crafting interventions. *Human Relations*, 66(8), pp.1029–1050. <https://doi.org/10.1177/0018726713477164>
- Preacher, K. J., and Hayes, A. F., 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res.*

- Methods* 40, pp.879–891. doi: 10.3758/BRM.40.3.879
- Purboarum, R. and Riyono, B., 2016. The Role of Quality of life on work engagement and work satisfaction, Perpustakaan Pusat Universitas Gadjah Mada Jogjakarta, *Thesis*
- Rigoni, B. and Nelson, B., 2016. Few millennials are engaged at work. Available at: <<http://news.gallup.com/businessjournal/195209/few-millennials-engaged-work.aspx?version=print>> [Accessed 22 January 2018]
- Robertson, I. T., Birch, A. J. and Cooper, C. L., 2012. Job and work attitudes, engagement and employee performance: Where does psychological well-being fit in? *Leadership Organization Development Journal*, [e-journal] 33(3), pp.224–232. <https://doi.org/10.1108/01437731211216443>
- Rosso, B. D., Dekas, K. H. and Wrzesniewski, A., 2010. On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, pp.91–127. <https://doi.org/10.1016/j.riob.2010.09.001>
- Rothmann, S. and Buys, C. 2011. Job demands and resources, psychological conditions, religious coping and work engagement of reformed church ministers. *Journal of Psychology in Africa*, [e-journal] 21(2), pp.173–185. <https://doi.org/10.1080/14330237.2011.10820446>
- Rothmann, S. and Rothmann Jr, S. 2010. Factors associated with employee engagement in South Africa. *SA Journal of Industrial Psychology*, [e-journal] 36(2), pp.1–12. <https://doi.org/10.4102/sajip.v36i2.925>
- Schaufeli, W. B., Bakker, A. B. and Salanova, M., 2006. The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), pp.701–716. <https://doi.org/10.1177/0013164405282471>
- Scroggins, W. A., 2008. The relationship between employee fit perceptions, job performance, and retention: Implications of perceived fit. *Employee Responsibilities and Rights Journal*, [e-journal] 20(1), pp.57–71. <https://doi.org/10.1007/s10672-007-9060-0>
- Septiyani, R. and Himam, F., 2013, The Relationship Between Emotional Labour and Work Engagement with organizational Support as Moderator, Perpustakaan Pusat Universitas Gadjah Mada Jogjakarta, *Thesis*
- Shamir, B. 1991. Meaning, self, and motivations in organizations. *Organization Studies*, 12(3), pp.405–424.
- Shuck, B., Reio, T. G. and Rocco, T. S., 2011. Employee engagement: An examination of antecedent and outcome variables. *Human Resource Development International*, 14(4), pp.427–445. <https://doi.org/10.1080/13678868.2011.601587>
- Singh, S. P. and Karki, J., 2015. The impact of job engagement and organizational commitment on organisational performance. *The International Journal of Business Management*, 3(5), 3(4), pp.279–285. <https://doi.org/10.12691/jbms-3-5-1>
- Steger, M. F., Dik, B. J. and Duffy, R. D., 2012. Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment*, pp.1–16. <https://doi.org/10.1177/1069072711436160>
- Tims, M., Bakker, A. B. and Derks, D., 2015. Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, [e-journal] 24(6), pp.914–928. <https://doi.org/10.1080/1359432X.2014.969245>
- Utomo, G., Riyono, B. and Budiharto, S., 2017. Effectivity of Management by Objectives Program on Employees' Work Engagement at Ice Cream Company in Jogjakarta, *Jurnal Ilmiah Psikologi Terapan*, 5 (3), pp.210–225. <https://doi.org/10.22219/jipt.v5i2.4562>
- Van Den Broeck, A., Vansteenkiste, M., De Witte, H. and Lens, W., 2008. Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work and Stress*, 22 (3), pp.277–294. <https://doi.org/10.1080/02678370802393672>
- Waite, S., 2018. The Fourth Industrial Revolution and the Future of Work. - RevUnit. Available at: <<http://blog.revunit.com/fourth-industrial-revolution-future-work/>> [Accessed 12 December 2017]
- Widhiharso, W., 2010. Berkenalan dengan analisis mediasi: Regresi dengan melibatkan variabel mediator (bagian pertama). Available at: <<http://widhiharso.staff.ugm.ac.id/wp/berkenalan-dengan-analisis-mediasi-regresi-dengan-melibatkan-variabel-mediator-bagian-pertama/comment-page-1/>> (Accessed 5 March 2018)
- Wrzesniewski, A., McCauley, C., Rozin, P. and Schwartz, B., 1997. Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31, pp.21–33, [Online]

Available at:  
<<http://faculty.som.yale.edu/amywrzesniewski/documents/Jobscareersandcallings.pdf>> [Accessed 11 November 2017]

Yongxing, G., Hongfei, D., Baoguo, X. and Lei, M., 2017. Work engagement and job performance: the moderating role of perceived organizational support. *Anales de Psicología*, 33(3), pp.708-718.  
<https://doi.org/10.6018/analesps.33.3.238571>

