

A Study of the Relationship between Work Engagement and Job Satisfaction in Private Companies in Kurdistan

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Abstract— *The purpose of this study is to investigate the relationship between work engagement and job satisfaction. The research aimed to examine each of (equal opportunities, personal influence, nature of career, development opportunity, employee recognition, work challenge, supervisor behaviour, ethics and integrity, and job empowerment) and its relationship with job satisfaction in private companies in Erbil. The researcher used quantitative research method in order to measure the relationship between work engagement and job satisfaction, however only 108 respondents were participated in the current study. The researcher used multiple regression analysis to measure the relationship among variables. The researcher found that workplace challenge had the highest value among other work engagement elements = .671 and P-value = .000 which indicates that many private companies' employees are engaged to their job because of time management, Overwhelming workloads and communication. This research highlighted the significance of workplace challenge that inspires the individuals to be more engaged to their organization. Employee engagement is a positive attitude towards the workplace and is the degree that an individual is bind to the organization. Only small number of employees had participated in this research from private companies in Kurdistan, which limits the outcome of the study.*

Keywords— *Engagement, Job satisfaction, Kurdistan.*

I. INTRODUCTION

Improved employee engagement can be both physical and mental, reflecting the behavioural and attitudinal fundamentals of the concept. In today's competitive environment there is a considerable body of indication representing the advantages to businesses of having strongly engaged employees. Several academician and scholars proved that engaged employees less likely will leave the organization for instance (Andrew, et al., 2017), meanwhile;

according (Li, et al., 2017), engaged employees will attend regularly. Nowadays, none of the businesses can survive without work engagement. Therefore, it is significant to recognize the conception of engagement and its possible consequence. According to (Moura, et al., (2014), engagement is a belief that demonstrates individual's strength of attachment to an organization. The purpose of this study is to identify the relationship between work engagements with job satisfaction in private universities in Kurdistan.

II. LITERATURE REVIEW

According to Yuang, et al., (2016), employee engagement refers to individuals' participation or attachment to the organizations. According to (Ilkhanizadeh, and Karatepe, 2017), employee engagement is an effective reaction to the entire organization and the degree of employees' loyalty to their organization. According to Mróz, and Kaleta, (2016), employee engagement is basically employees' attitude to organization. According to (Orgamidez-Romsa, and Almeida, 2017), employee engagement is a psychological degree which describes the individuals' relationships with the organization and has associations to continue as a member in the organization. According to (Wingerden, et al., 2017), employee engagement is the degree to which the individuals have strong attachment to their organization. As per (Orgambídez-Ramos, et al., 2014) stated employee engagement is significant for every organization, because high levels of employee engagement results in higher level of job satisfaction. According to (Lu, et al., 2016) engaged employees mostly have no intention to quit their job. (Rayton, & Yalabik, 2014), proved a negative relationship between employee commitment and employee turnover intentions, furthermore they proved a positive and significant relationship between work engagement and job satisfaction. On the other hand many academic scholars proved a positive relationship between employee

engagement and employee satisfaction (Kooij, et al., 2017). Organizations can benefit from engaged employees in many ways for instance, reducing employee turnover and increasing level of job satisfaction (Karanika-Murray, et al., 2015).

According to (Bakker, and Demerouti, 2017), there is an argue as to whether work engagement is pointed out as behaviour or attitude statement in terms of psychological view, however (Lu, et al., 2014) stated that work engagement can be viewed as both psychological statements therefore it could be behaviourally and attitudinally stated for the aimed of the current research and in line with a strong literature, the researcher pointed out the work engagement as an affective-motivational state. Knight, et al., (2017), defined job satisfaction as emotion or feeling that an employee has regarding current job. Also, they pointed out that many academic scholars tried to determine several job satisfaction components, assess relative significance for each job satisfaction components and investigate the influence of all these job satisfaction components on employee’s satisfaction and productivity. According to Trochimiuk, (2015), stated that professional development for employees will lead to increase their level of commitment and be more engaged to their tasks and duties. According to Karatepe, and Olugbade, (2016), job satisfaction defined as individual’s overall attitude toward job. Boamah, et al., (2017), stated that inspiration is closely associated to job satisfaction. Many factors are related to job satisfaction for instance, social relationships, job analysis, employee training, desires and needs, recruitment and selection, orientation, working conditions, development and quality of management. (Aunola, et al., 2016). Furthermore, it has been pointed out that several researcher

and academicians attempted to determine several job satisfaction components, assess relative significance for each job satisfaction components and investigate the influence of all these job satisfaction components on employee’s satisfaction. Job satisfaction is an attitude which is an outcome of outline and consistent of many precise likes and dislikes experiences with the job. According to Pawłowska and Zdziarski (2015), stated that the most important and essential asset for almost all organization is human resource. A job satisfaction for an individual considers as a degree of satisfaction and it depends on the job. Job satisfaction is a vital pointer of how an individuals’ feel regarding of the job and defines how much they are satisfied with their job. The level of satisfaction of individuals linked with rise of organizational output. Job satisfaction of an individual considers an important factor is to the achievement of an organization. In every organization a high rate of individuals’ satisfaction is strongly correlated with a low level of employee turnover. Therefore, keeping individuals happy and satisfied with their present job would be a leading priority for every organization. Human resource management practices attempt to allocate and assign the human capital in the great potential ways to attain long term organizational objectives, they offer penalty of advantages and benefits resulting increasing level of job satisfaction (Vera, et al., 2016). Moreover, according to Bartak and Jabłoński, (2016) motivated employees are expected to be more engaged and committed to their duties and responsibilities.

III. CONCEPTUAL FRAMEWORK

Research Model

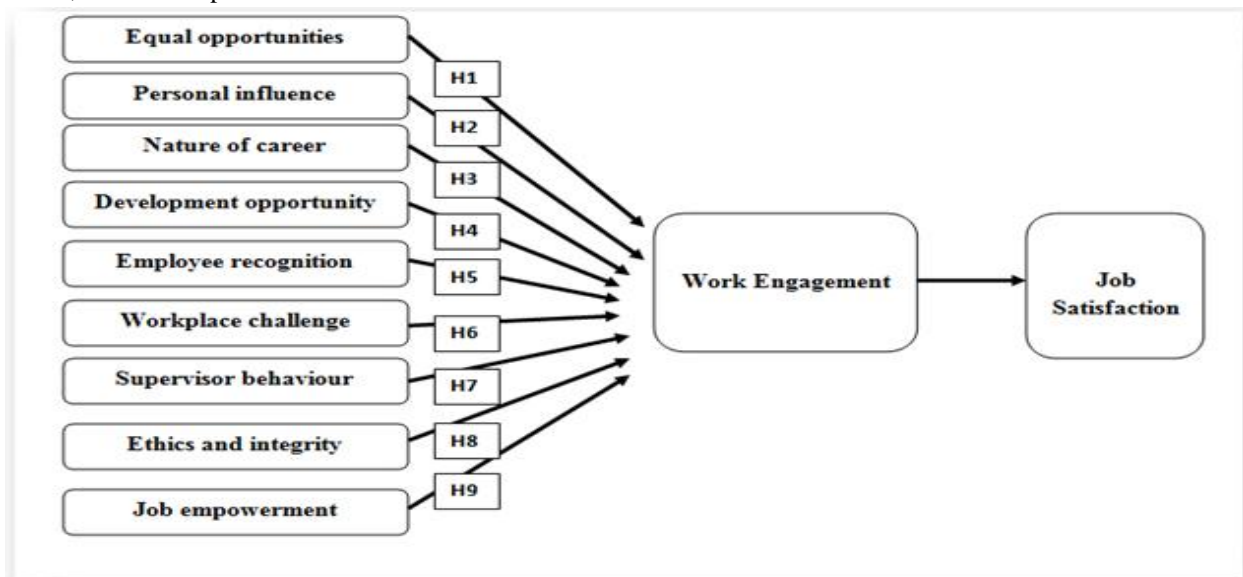


Fig.1: Research Model by the author, February, 2017

Research Hypotheses

H1: Work engagement mediates the positive relationship between equal employee opportunities (fair treatment) and job satisfaction.

H2: Work engagement mediates the positive relationship between personal influence and job satisfaction.

H3: Work engagement mediates the positive relationship between nature of career and job satisfaction.

H4: Work engagement mediates the positive relationship between development opportunity and job satisfaction.

H5: Work engagement mediates the positive relationship between employee recognition and job satisfaction.

H6: Work engagement mediates the positive relationship between workplace challenge and job satisfaction.

H7: Work engagement mediates the positive relationship between supervisor behaviour and job satisfaction.

H8: Work engagement mediates the positive relationship between ethics and integrity and job satisfaction.

H9: Work engagement mediates the positive relationship between job empowerment and job satisfaction

Methodology

The researcher used a quantitative research method to test the developed research hypotheses. Currently there are 8622 private companies registered in the Erbil Chamber of Commerce & Industry, these including general trade companies and other specialized companies. Based on the participants' request, the researcher kept companies identity confidentially; therefore the researcher kept any identifying information out of published reports. The researcher distributed 120 surveys at private companies in Kurdistan; however only 108 surveys were filled and received back from the participants, therefore the sample size for the current study is 130 participants.

Analysis**Demographic analysis**

Table.1: Demographic analysis

Items		Frequency	Percent
Gender	Male	76	70.4
	Female	32	29.6
Age	20-25	16	14.8
	26-30	22	20.4
	31-35	25	23.1
	36-40	17	15.7
	41-45	15	13.9
	46-50	5	4.6
	51-55	5	4.6
	56 and above	3	2.8
Marital status	Single	48	44.4
	Married	60	55.6
Level of education	Bachelor	91	84.3
	Master	13	12.0
	PhD	4	3.7

As seen in table (1) demographic analysis for respondents participated in this research. Based on to the descriptive analysis, the researcher was able to analyze respondents' background information. Concerning the respondents' gender; it was found that 76 male from total of 108 respondents participated in this research and 32 female from total of 108 respondents participated in this research. Concerning the respondents' age; it was found that 16 from total of 108 respondents fall in a group of 20-25 years old, 22 from total of 108 respondents fall in a group of 26-30 years old, 25 from total of 108 respondents fall in a group of 31-35 years old, 17 from total of 108 respondents fall in a

group of 36-40 years old, 15 from total of 108 respondents fall in a group of 41-45 years old, 5 from total of 108 respondents fall in a group of 46-50 years old, 5 from total of 108 respondents fall in a group of 51-55 years old and finally only three respondents from total of 108 respondents fall in a group of 56 years old and above. Concerning the of respondents' marital status; it was found that 60 married respondents participated in this study and 48 single respondents participated in this study. Concerning the respondents' level of education; it was found that 91 respondents from total of 108 respondents had obtained college degree, 13 respondents from total of 108

respondents had obtained master degree, and only four respondents from total of 108 respondents had obtained PhD degree.

Table 2: Reliability Analysis

Variables	Item N.	Cronbach's Alpha
Supervisor behaviour	7	.829
Ethic & integrity	7	.770
Job empowerment	7	.741
Equal opportunities	7	.726
Personal development	7	.727
Nature of career	7	.751
Development opportunity	7	.855
Workplace challenge	7	.835
Employee recognition	7	.780
Job satisfaction	10	.773

The researcher implemented reliability analysis to (as seen in table-2) the values of Cronbach's Alpha for supervisor behaviour as independent factor, found to be $.829 > .6$ this indicates that the items used to measure supervisor behaviour factor were reliable for the current study, the values of Cronbach's Alpha for ethic & integrity as independent factor, found to be $.770 > .6$ this indicates that the items used to measure ethic & integrity factor were reliable for the current study, the values of Cronbach's Alpha for job empowerment as independent factor, found to be $.741 > .6$ this indicates that the items used to measure job

empowerment factor were reliable for the current study, the values of Cronbach's Alpha for equal opportunity as independent factor, found to be $.726 > .6$ this indicates that the items used to measure equal opportunity factor were reliable for the current study, the values of Cronbach's Alpha for Personal development as independent factor, found to be $.727 > .6$ this indicates that the items used to measure Personal development factor were reliable for the current study, the values of Cronbach's Alpha for Nature of career as independent factor, found to be $.751 > .6$ this indicates that the items used to measure Nature of career factor were reliable for the current study, the values of Cronbach's Alpha for Development opportunity as independent factor, found to be $.855 > .6$ this indicates that the items used to measure Development opportunity factor were reliable for the current study, the values of Cronbach's Alpha for Workplace challenge as independent factor, found to be $.835 > .6$ this indicates that the items used to measure Workplace challenge factor were reliable for the current study, the values of Cronbach's Alpha for Employee recognition as independent factor, found to be $.780 > .6$ this indicates that the items used to measure Employee recognition factor were reliable for the current study, and the values of Cronbach's Alpha for Job satisfaction as dependent factor, found to be $.773 > .6$ this indicates that the items used to measure Job satisfaction factor were reliable for the current study. However, the results revealed that all items used to measure the relationship between nine independent factors and dependent factor were reliable for the current research.

Table.1: Correlation Analysis

		1	2	3	4	5	6	7	8	9
Equal Opportunities	Pearson	1								
	Correlation									
	Sig. (2-tailed)									
Personal influence	N	108								
	Pearson	.399**	1							
	Correlation									
Nature of career	Sig. (2-tailed)	.000	.000							
	N	108	108							
	Pearson	.576**	.470**	1						
Development opportunity	Correlation									
	Sig. (2-tailed)	.000	.000	.000						
	N	108	108	108	108					
Equal Opportunities	Pearson	.347**	.389**	.365**	1					
	Correlation									
	Sig. (2-tailed)	.000	.000	.000	.000					
Personal influence	N	108	108	108	108					

Workplace Challenge	Pearson Correlation	.632**	.696**	.615**	.611**	1				
	Sig. (2-tailed)	.000	.000	.000	.000					
	N	108	108	108	108	108				
Employee recognition	Pearson Correlation	.434**	.556**	.419**	.793**	.673**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000				
	N	108	108	108	108	108	108			
Supervisor behaviour	Pearson Correlation	.561**	.753**	.547**	.634**	.772**	.730**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000			
	N	108	108	108	108	108	108	108		
Ethic & integrity	Pearson Correlation	.757**	.672**	.548**	.179**	.492**	.299**	.565**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	N	108	108	108	108	108	108	108	108	
Job empowerment	Pearson Correlation	.778**	.455**	.571**	.244**	.504**	.308**	.437**	.644**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	108	108	108	108	108	108	108	108	108
Job satisfaction	Pearson Correlation	.521**	.630**	.414**	.354**	.662**	.443**	.601**	.533**	.522**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	108	108	108	108	108	108	108	108	108

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

The researcher attempted to find the correlation between nine independent variables and a dependent variable, therefore the correlation analysis was implemented (as seen in table-3). It was found that the value of Pearson correlation for equal opportunity = .521** > .01 therefore there is a positive and significant correlation between equal opportunity and job satisfaction, in terms of the strength it was found to be a moderate correlation, the value of Pearson correlation for personal influence = .630** > .01 therefore there is a positive and significant correlation between personal influence and job satisfaction, in terms of the strength it was found to be a strong correlation, the value of Pearson correlation for nature of career = .414** > .01 therefore there is a positive and significant correlation between nature of career and job satisfaction, in terms of the strength it was found to be a weak correlation, the value of Pearson correlation for development opportunity = .354** > .01 therefore there is a positive and significant correlation between development opportunity and job satisfaction, in terms of the strength it was found to be a weak correlation, the value of Pearson correlation for workplace challenge =

.662** > .01 therefore there is a positive and significant correlation between workplace challenge and job satisfaction, in terms of the strength it was found to be a strong correlation, the value of Pearson correlation for employee recognition = .443** > .01 therefore there is a positive and significant correlation between employee recognition and job satisfaction, in terms of the strength it was found to be a weak correlation, the value of Pearson correlation for supervisor behaviour = .601** > .01 therefore there is a positive and significant correlation between supervisor behaviour and job satisfaction, in terms of the strength it was found to be a strong correlation, the value of Pearson correlation for ethics and integrity = .533** > .01 therefore there is a positive and significant correlation between ethics and integrity and job satisfaction, in terms of the strength it was found to be a moderate correlation, and the value of Pearson correlation for job empowerment = .522** > .01 therefore there is a positive and significant correlation between job empowerment and job satisfaction, in terms of the strength it was found to be a moderate correlation.

Table.2: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736 ^a	.542	.538	.33447

a. Predictors: (Constant), empowerment, development, personal, career, ethic, challenge, recognition, behaviour, equal

It was found that the value of R square = .542 (as seen in table-4) this indicates that 54% of the variables have been explained.

Table.3: ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.814	9	14.424	128.933	.000 ^b
	Residual	109.745	981	.112		
	Total	239.559	990			

a. Dependent Variable: satisfaction

b. Predictors: (Constant), empowerment, development, personal, career, ethic, challenge, recognition, behaviour, equal

It was found the value F = 128.933 and since the value is greater than .001, this indicates that there is a positive association between variables used to test research hypotheses.

Table.4: Coefficients

Coefficients						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.687	.104		6.617	.000
	Equal opportunities	.448	.023	.521	19.213	.000
	Personal influence	.584	.023	.630	25.509	.000
	Nature of career	.414	.029	.414	14.336	.000
	Development opportunity	.269	.023	.354	11.925	.000
	Workplace challenge	.671	.024	.662	27.796	.000
	Employee recognition	.389	.025	.443	15.566	.000
	Supervisor behaviour	.571	.024	.601	23.659	.000
	Ethic & integrity	.446	.022	.533	19.831	.000
	Job empowerment	.497	.026	.522	19.274	.000

a. Dependent Variable: satisfaction

The researcher utilized multiple regression analysis to find the most effective and suitable factors increasing level of job satisfaction in private companies in Kurdistan. It was found that the value of B for equal opportunity = .448 > .001

and P-value = .000, this indicated that there is positive relationship between equal opportunity and job satisfaction, accordingly the first research hypothesis was supported which stated that "Work engagement mediates the positive

relationship between equal employee opportunities (fair treatment) and job satisfaction”, the value of B for personal influence = .584 >.001 and P-value = .000, this indicated that there is positive relationship between personal influence and job satisfaction, accordingly the second research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between personal influence and job satisfaction”, the value of B for nature of career = .414 >.001 and P-value = .000, this indicated that there is positive relationship between nature of career and job satisfaction, accordingly the third research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between nature of career and job satisfaction”, the value of B for development opportunity = .269 >.001 and P-value = .000, this indicated that there is positive relationship between development opportunity and job satisfaction, accordingly the fourth research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between development opportunity and job satisfaction”, the value of B for workplace challenge = .671 >.001 and P-value = .000, this indicated that there is positive relationship between workplace challenge and job satisfaction, accordingly the fifth research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between workplace challenge and job satisfaction”, the value of B for employee recognition = .389 >.001 and P-value = .000, this indicated that there is positive relationship between employee recognition and job satisfaction, accordingly the sixth research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between employee recognition and job satisfaction”, the value of B for supervisor behaviour = .571 >.001 and P-value = .000, this indicated that there is positive relationship between supervisor behaviour and job satisfaction, accordingly the seventh research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between supervisor behaviour and job satisfaction”, the value of B for ethic and integrity = .446 >.001 this indicated that there is positive relationship between ethic and integrity and job satisfaction, accordingly the eighth research hypothesis was supported which stated that “ Work engagement mediates the positive relationship between ethics and integrity and job satisfaction”, and the value of B for job empowerment = .497 >.001 and P-value = .000, this indicated that there is positive relationship between job empowerment and job satisfaction, accordingly the ninth research hypothesis was supported which stated that “ Work engagement mediates

the positive relationship between job empowerment and job satisfaction”.

IV. CONCLUSIONS

Employee engagement is a positive attitude towards the workplace and is the degree that an individual is bind to the organization. This research highlighted the significance of workplace challenge that inspires the individuals to be more engaged to their organization. Only small number of employees had participated in this research from private companies in Kurdistan, which limits the outcome of the study. The researcher used quantitative research method in order to measure the relationship between work engagement and job satisfaction, however only 108 respondents were participated in the current study. The researcher used multiple regression analysis to measure the relationship among variables, in private companies, most of the employees depend and get excited more upon the workplace challenge, and it demonstrates a positive indication of the employees revealing the attachment and engagement of employees to the organization. According to multiple regression analysis, the researcher found that workplace challenge had the highest value among other work engagement elements = .671 and P-value = .000, which indicates that many private companies’ employees are engaged to their job because of time management, Overwhelming workloads and communication.

REFERENCES

- [1] Andrew, N., Amanda,A., Ingrid, N., Stacey, C., Anthony, L., and Kathryn, P. (2017).The work-based predictors of job engagement and job satisfaction experienced by community health professionals. *Health Care Management Review*, 42(3), 237-246, doi: 10.1097/HMR.000000000000104
- [2] Aunola, M., Seppälä, K. and Hakanen, J. (2016), Work engagement–team performance relationship: shared job crafting as a moderator. *Journal of Occupation Organizational Psychology*, 89: 772–790. doi:10.1111/joop.12154
- [3] Bakker, A. and Demerouti, E. (2017). Strategic and proactive approaches to work engagement. *Journal of Occupational Health Psychology*, 22(3), 273–285, doi: 10.1016/j.orgdyn.2017.04.002
- [4] Bartak, J. and Jabłoński, T. (2016). Human Capital Versus Income Variations: Are They Linked in OECD Countries?. *Journal of Management and Business Administration Central Europe*, 24(2),56-73, DOI: 10.7206/jmba.ce.2450-7814.169

- [5] Boamah S.A., Read E.A. & Spence Laschinger H.K. (2017) Factors influencing new graduate nurse burnout development, job satisfaction and patient care quality: a time-lagged study. *Journal of Advanced Nursing*, 73(5), 1182–1195. doi: 10.1111/jan.13215
- [6] Ilkhanizadeh, S. and Karatepe, O. (2017). An examination of the consequences of corporate social responsibility in the airline industry: Work engagement, career satisfaction, and voice behaviour. *Journal of Air Transport Management*, 59, 8-17, doi: <https://doi.org/10.1016/j.jairtraman.2016.11.002>
- [7] Karanika-Murray, M., Duncan, N., Pontes, H., Griffiths, M. (2015) "Organizational identification, work engagement, and job satisfaction". *Journal of Managerial Psychology*, 30(8),1019-1033,doi:<https://doi.org/10.1108/JMP-11-2013-0359>
- [8] Karatepe, O., and Olugbade, O. (2016). "The mediating role of work engagement in the relationship between high-performance work practices and job outcomes of employees in Nigeria", *International Journal of Contemporary Hospitality Management*,28(10),2350-2371,doi: <https://doi.org/10.1108/IJCHM-03-2015-0145>
- [9] Knight, C. Patterson, M. and Dawson, J. (2017). Building work engagement: A systematic review and meta-analysis investigating the effectiveness of work engagement interventions. *Journal of Organizational Behavior*,8(6),792–812
- [10] Kooij, D., Tims, M., & Akkermans, J. (2017). The influence of future time perspective on work engagement and job performance: the role of job crafting. *European Journal of Work and Organization Psychology*, 26(1), 4-15, doi: <http://dx.doi.org/10.1080/1359432X.2016.1209489>
- [11] Li, M., Wang, Z., Gao, J., and You, X. (2017). Proactive Personality and Job Satisfaction: the Mediating Effects of Self-Efficacy and Work Engagement in Teachers. *A Journal for Diverse Perspectives on Diverse Psychological Issues*, 36(1), 48–55 |
- [12] Lu, C., Wang, H., Lu, J., Du, D., and Bakker, A.(2014).Does work engagement increase person–job fit? The role of job crafting and job insecurity. *Journal of Vocational Behaviour*, 84(2), 142-152, doi: <https://doi.org/10.1016/j.jvb.2013.12.004>
- [13] Lu, L., Chieh, A., Gursoy, D., and Neale, N. (2016) "Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees", *International Journal of Contemporary Hospitality Management*, 28(4), 737-761,doi: <https://doi.org/10.1108/IJCHM-07-2014-0360>
- [14] Moura, D., Orgambidez-Ramos, A. and Gonçalves, G.(2014).Role Stress and Work Engagement as Antecedents of Job Satisfaction: Results From Portugal. *Europe's Journal of Psychology*, 10(2), 291–300, doi:10.5964/ejop.v10i2.714
- [15] Mróz, J., and Kaleta, K. (2016).relationships between personality, Emotional labor, work engagement and job satisfaction in service professions. *International Journal of Occupational Medicine and Environmental Health*, 29(5), 1-16, doi: <http://dx.doi.org/10.13075/ijom.1896.00578>
- [16] Orgambidez-Ramos A., Borrego-Alés Y., and Mendoza-Sierra, I. (2014). Role stress and work engagement as antecedents of job satisfaction in Spanish workers. *Journal of Industrial Engineering and Management*, 7(1), 360-372, doi: <http://dx.doi.org/10.3926/jiem.992>
- [17] Orgamidez-Romsa, A. and Almeida, H. (2017). Work engagement, social support, and job satisfaction in Portuguese nursing staff: A winning combination. *Applied Nursing Research*, 36, 37-41,doi: doi.org/10.1016/j.apnr.2017.05.012
- [18] Pawłowska, A. and Zdziarski, M. (2015). Dimensionality of Leadership in the Perceptions of Senior Human Resource Executives in Poland. *Journal of Management and Business Administration Central Europe*, 23(1),49-68, DOI: 10.7206/mba.ce.2084-3356.133
- [19] Rayton, B. & Yalabik, Z. (2014).Work engagement, psychological contract breach and job satisfaction. *The International Journal of Human Resource Management*, 25(17), 2382-2400, doi: <http://dx.doi.org/10.1080/09585192.2013.876440>
- [20] Trochimiuk, P. (2015). Professional Development of Older Employees in Small and Medium Enterprises. *Journal of Management and Business Administration Central Europe*, 23(1),56-73, DOI: 10.7206/mba.ce.2084-3356.135
- [21] Vera M., Martínez, I., Lorente, L., and Chambel, M. (2016). The Role of Co-worker and Supervisor Support in the Relationship between Job Autonomy and Work Engagement Among Portuguese Nurses: A Multilevel Study. *Social Indicators Research*, 126(3),1143-1156, doi: <https://doi.org/10.1007/s11205-015-0931-8>
- [22] Wingerden, J., Derks, D., Bakker, A. (2017). The Impact of Personal Resources and Job Crafting Interventions on Work Engagement and Performance.

Human resource management Journal, 56(1), 51-67,
doi:10.1002/hrm.21758

- [23] Yuang, Y., Lee, J., McFadden, A., Murphy, L., Robertson, M., Cheung, J., and Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Journal of Applied Ergonomics*, 55, 248-257, doi: <https://doi.org/10.1016/j.apergo.2015.10.007>