

*Original Research Article*

# Are Perceived Organizational Support and Flexible Working Arrangement Able to Influence Employee Engagement among Millennials?

---

## ABSTRACT

**Aims:** This study aims to find out the influence of Perceived Organizational and Flexible Working Arrangements on Employee Engagement among millennials while Work/Life Balance is an intervening variable.

**Study Design:** This study used quantitative methods. The data was collected using an online questionnaire. This study involved Millennials as a sample with 151 respondents who came from various kinds of companies

**Place and Duration of Study:** The study was taken place at Palopo, South Sulawesi. This study was conducted between March and May 2018.

**Methodology:** This study involved 151 respondents and was conducted in Palopo. The respondents came from various companies and institutions such as Government-owned companies, Banking companies, Private companies, Educational institutions, Finance companies, Insurance companies, etc.

**Results:** Hypothesis 1, Perceived Organizational Support on Work/Life Balance produces T statistics values of 5.630 with a probability of 0.000. The test results show that the probability  $< \alpha$  (5%). It means that there is a significant direct influence of Perceived Organizational Support on Work/life Balance. Hypothesis 2, the influence of a Flexible Working Arrangement on Work/Life Balance generates a T statistics value of 3.678 with a probability of 0.000. The test results show that the probability  $< \alpha$  (5%). It means that there is a significant direct influence of Flexible Working Arrangements on Work/Life Balance. Hypothesis 3, the influence of Work/Life Balance on Employee Engagement. generate T statistics values of 5.924 with a probability of 0.000. The test results show that the probability  $< \alpha$  (5%). It means that there is a significant direct influence of Work/Life Balance on Employee Engagement. Hypothesis 4, the influence of Perceived Organizational Support on Employee

Engagement mediated by Work/life Balance generates in indirect influence coefficient direct influence coefficient It means that there is a significant influence of Perceived Organizational Support on Employee Engagement through Work/life Balance. Hypothesis 5, the influence of the Flexible Working Arrangement on Employee Engagement mediated by Work/life Balance generates in indirect influence coefficient direct influence coefficient. It means that there is a significant influence on the Flexible Working Arrangement of Employee Engagement through Work/life Balance.

**Conclusion:** The results of this study indicated that; 1). Perceived Organizational Support and Flexible Working Arrangements have a positive and significant influence on Work/Life Balance, 2). Work/life Balance has a positive and significant influence on Employee Engagement 3). Perceived Organizational Support and Flexible Working Arrangement have positive and significant influence on Employee Engagement with Work / life balance as a mediating variable.

*Keywords: Perceived Organizational Support, Flexible Working Arrangement, Work/Life Balance, Employee Engagement*

## 1. INTRODUCTION

Generally, engagement is referred to as commitment. Kanste [1] defines employee engagement as a positive state of well-being in the workplace. Employee engagement refers to an individual's level of motivation and how they may use this motivation to benefit their organization. This level of motivation, which can be described as either intrinsic or extrinsic, may also be raised by the organization itself, as they look to ensure that employee becomes fully engaged and passionate about their work. Pitt-Catsouphes & MatzCosta [2] states that engaged employee is more productive, less stressed, more satisfied with their personal life, and more loyal to the organization than those disengaged employees. Employee engagement is a very critical issue that must be addressed in every workplace because of its varying positive and negative effects of it in the workforce. Kanste [1] states that there are positive outcomes of employee engagement itself such as organizational citizenship behavior, occupational commitment, job involvement, identification with an organization, dedication to role, low turnover intention and willingness to strive in an organization's favor, as well as improved organizational success and an overall increase in employee productivity. In some cases, it must be the responsibility

of the employer to meet the needs of the employees in order to keep them as engaged as possible.

One of the factors that employers can use to make employees to be more engaged in work/life balance [3]. Employees who perceive a balance between their work and personal lives are more likely to feel positive emotions and have positive attitudes, such as engagement [4].

Previous research has shown that work-life balance entails employees' behaviors, attitudes, well-being, and organizational effectiveness [5]. An imbalance between work and private life can cause absenteeism, dissatisfaction, and low productivity [6]. On the other hand, employees who are able to achieve this balance can enhance their well-being since they are better capable of effectively allocate their energy and time to the demands they experience [6]. The researcher also found that when employees are able to balance their work and private lives, it can have various consequences for both employees and employers. The researcher has discovered that when employees achieve work-life balance, it results in improved job and overall satisfaction [7,4], higher levels of commitment to the organization and reduced turnover intentions [8]. Beyond these results, employers who pay attention to employees' work-life balance can also benefit in terms of recruitment

advantages and employer branding [9]. All in all, work-life balance can influence employees' behavior and attitudes, which in turn positively affect organizations.

However, it is important to study the factors that can influence the work/life balance. Thakur and Kumar [10] have discovered some factors that might be able to influence the creation of work-life balance, which derived from the factors of work, family, and social environment, including organizational support and flexibility in the workplace. So, the organization must maintain the perception of organizational support so that employees feel that the organization cares about their well-being and their contribution, on the other hand, it is the duty of the organization to create the policy such as flexibility in scheduling the work for the employee in order to create more opportunity to balance employee' work and non-work activities. By that consideration, in this study will be only focused on two factors such as perceived organizational support and flexible working arrangement. Perceived organizational support (POS) refers to the employee's global beliefs concerning the extent to which the organization values them, cares for their well-being, and supports their social and emotional needs by providing resources to help [11]). The organizational support plays an important part in creating a work-life balance for the employee and is expected to help the employees in achieving one. Meanwhile, Flexible working arrangement is defined as company provides benefits that allow employees to have the control over when and where they work outside of the standard workday [12]. Tipping et. al [13] states that employees believe flexible working arrangement can improve workplace morale, which might positively influence the work-life balance; in addition, employees believe that employer is able to support them balance their work and private life. This study will examine the engagement among the employee

and it already mentioned above that in order to achieve that, the organization must create a work/life balance. Based on these considerations and reviews that are explained above, this study will use work/life balance as an intervening variable to examine the relationship between perceived organizational support and flexible working arrangement toward employee engagement. In order to strengthen the judgment of work/life balance as an intervening variable. This study captures the gap from several previous studies that examine the relationship between perceived organizational support and flexible working arrangement toward employee engagement. According to Ahmadi et al. [14], there is a positive correlation between perceived organizational support and employee engagement. It is the duty of the management to enhance employee perception of organization support by valuing their contribution; so that they can make employees more engaged which is very essential for the overall effectiveness of the organization. Contrary to that result, Solnet and Kralj [15] found that new-generation employees (Gen Y) are less engaged and perceived lower organizational support when compared to the older generation (No-Gen Y). So, organizations must strive hard to improve employee perception, to make this generation (Gen Y) to be more engaged.

Many studies have discovered evidence that flexible work arrangements have a positive impact on both organizations and employees. Richman et. al [16] have provided evidence that perceived workplace flexibility and supportive work-life policies have a positive impact on employee engagement. Moreover, after analyzing a multi-organizational database of a consulting company, Johnson, Shannon, and Richman [17] declared that employees who has the flexibility demonstrated higher results in the engagement level. Contrary to the above studies, these studies suggested that

flexible working arrangements have a negative impact on work engagement. Timms et. al [18] conducted research on employees' use of flexible working arrangements and their relationship to work engagement. The research found that the use of FWA contributed to reduced employee engagement over time. Consistent with previous research, 149 survey results from employees at a large technology company's Bay Area branch revealed that actual use of flexibility did not affect engagement, above and beyond that of perceptions of flexibility and engagement [19]. Christiana [20] also found that flextime has no significant influence on employee engagement. Knowing that there are still some disagreements from the previous research. So, it is important to explore more about suitable human resource practices in order to create employee engagement.

Different from the previous study, this study will only focus on millennials as an object of the study. As millennial enters the workplace, this generation presents a challenge to managers, Millennials are not necessarily having a good engagement with the organization. The research conducted by Hewitt Associates [21] shows that employee engagement of Millennials is significantly lower than that of the employees representing older age groups. Twenge [22] has analyzed the changing attitudes towards work as new generations have entered the workplace and found that Millennials do not consider work as a central part of their life or appreciate it as much as the Baby Boomer generation. Twenge [22] found differences relevant to attitudes toward employee engagement between Millennials and Baby Boomers: particularly as Millennials seem to value extrinsic benefits more than Baby Boomers do. Companies have to adapt to these changes in attitudes, since Millennials make up the majority of workers entering the workforce today, and

Baby Boomer retirement rates continue to rise. This is one example of the many things that today's generation desires and values in the workplace. Millennials may be less engaged as some organizations struggle to come to terms with the fact that their young workforce is not motivated by the same factors and environment as previous generations.

Additionally, the purpose of this study was to examine the relationship between perceived organizational support and flexible work arrangements for millennial employee engagement, while work-life balance was an intervening variable.

## **2. METHODOLOGY**

### **2.1. Measurement**

This study used an explanative research design because it aimed to examine to the hypothesis. While the data was collected based on the quantitative data collection method. Quantitative research methods involved the collection of information that can be analyzed numerically or using mathematically based methods (statistics), of which the results can be presented in statistical format, tables, and graphs. It is used to test a predetermined hypothesis or research questions and produce generalizable results [23]. In this study, each variable will be based on the value of each question item which is categorized into a score range with a Likert scale to get a tendency for respondents' answers. Generally, the Likert scale is assessed from strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5)

### **2.2. Sampling and data collection**

The population of this study was the employees who were born between the 1980s to 2000s or known as Millennials [24]. This study involved 151 respondents

and was conducted in Palopo. The respondents came from various companies and institutions such as Government-owned companies, Banking companies, Private companies, Educational institutions, Finance companies, Insurance companies and etc. For the sampling, this proposed study used non-probabilistic sampling to recruit study participants. According to Robinson [25], when using non-probabilistic sampling researchers used their judgment to select the subjects to be included in the study based on their knowledge of the phenomenon. Specifically, the non-probabilistic sampling of purposive sampling will be used to recruit samples. Purposive sampling represents a form of non-probabilistic sampling that targets a population with particular characteristics [26]. The use of purposive sampling involved recruiting targeted individuals with similar characteristics related to the

objectives of the study [27].

### 2.3. Data Analysis

The data was analyzed using SPSS 23 version. The chapter will report sample demographics (gender, age, job, position, tenure, and education), reliability and validity analysis, classical assumption test, and path analysis to summarize the responses of the participants on the variables investigated.

## 3. RESULT AND DISCUSSION

### 3.1 Respondents Characteristics

The characteristics of the respondent profile explain the respondent's identity which consists of gender, age, educational background, position, job, and tenure. The results are shown in the table below:

**Table 1. Respondent Characteristics**

Respondent Characteristic		Frequency	Percentage
Gender	Male	70	46,4%
	Female	81	53,6%
Age	18-20 years old	7	4,6%
	21-35 years old	132	87,4%
	> 35 years old	12	7,9%
Educational Background	Diploma	16	10,6%
	Bachelor Degree	75	49,7%
	Master Degree	30	19,9%
	High School	30	19,9%
Job	Lectures	18	11,9%
	BUMN Employee	42	27,8%
	Private employee	63	41,7%
	Insurance employee	10	6,6%
	Banker	8	5,3%
	Others	10	6,6%
Position	Supervisor	4	2,6%

	Lectures	18	11,9%
	Account Officer	9	6.0%
	Head of unit	3	2.0%
	Marketing	26	17.2%
	Staff	38	25.2%
	Teller	10	6.6%
	Others	43	28.4%
Tenure	<1 years	11	7,3%
	1 until < 3 years	51	33,8%
	3 until < 5 years	46	30,5%
	>5 years	43	28,5%

Source: Data Processed

Based on the data presented in Table 1, it is known that the respondents in this study were dominated by women at 53.6 % and male respondents at 46.4 %. On the age category, it is known that the respondents in this study have an age range that was dominated by respondents with the age of 21-35 years (87.4 %) and respondents with a range of 15-20 years 4.6 %. While respondents with age > 35 years were 7.9 %.

Based on the employee's educational background, it is known through the data presented in Table 1 that there were 10.6% of respondents who have a diploma degree, 49.7 % of respondents have a bachelor's degree, 19,9 % respondents have a master's degree, and also 19,9% respondents graduated from high school.

Based on the employees' jobs, it is known through the data presented in Table 1 that in this study most of the respondents work as private employees at 41.7 %, than respondents who worked as lecturers were 11.9 %, BUMN employees was 27.8 %, Insurance officer was 6.6 %, bank officer was 5.3 % and the others were 6.6 %.

Based on the employees' positions, it is known through the data presented in Table 1 that there were only 2.6% of respondents work as supervisors, 11,9% of respondents work as lecturers, 6.0% of respondents work as an account officer,

2.0% of respondents work as unit heads, respondents who held the position as marketing were 17.2 %, staff was 25.2 %, the teller was 6.6 %. Then for other positions was 28.4 %. This shows that respondents in this study have various positions in their workplace.

Based on the employee's tenure, it is known through the data presented in Table 1 that respondents who have a working period of <1 year was only 7.3%, respondents with a working period of 1 to <3 years were 33.8%. Then as much as 30.5 % of respondents have a working period of 3 to <5 years and respondents with a working period of > 5 years was 28 %.

### 3.2 Research Instruments Test

The questionnaire that was used as a data collection tool was first tested for its validity and reliability. This test was intended to measure the feasibility of the questionnaire as a data collection tool. The results of the validity and reliability test of the research questionnaire can be explained below:

#### 3.3.1. Validity Test

The calculation was done by correlating each item score with a total score using the *Pearson Correlation* technique. The testing criteria stated that if the correlation coefficient ( $r_{xy}$ ) is greater than the  $r$  table

value of 0.1598 means that the questionnaire item is valid as a data collection tool. The summary of the ( $r_{xy}$ )

calculation results can be seen in the table below.

**Table 2. Validity Test**

<b>Variable</b>	<b>Item</b>	<b>Correlation Coef.</b>	<b>r table</b>	<b>Output</b>
Employee Engagement	y1	0,412	0,1598	Valid
	y3	0,475	0,1598	Valid
	y4	0,471	0,1598	Valid
	y5	0,540	0,1598	Valid
	y6	0,623	0,1598	Valid
	y7	0,586	0,1598	Valid
	y8	0,602	0,1598	Valid
	y9	0,670	0,1598	Valid
	y10	0,630	0,1598	Valid
	y11	0,655	0,1598	Valid
	y12	0,614	0,1598	Valid
	y13	0,647	0,1598	Valid
	y14	0,669	0,1598	Valid
	y15	0,738	0,1598	Valid
	y16	0,620	0,1598	Valid
	y17	0,533	0,1598	Valid
	Perceived Organizational Support	x1.1	0,505	0,1598
x1.2		0,612	0,1598	Valid
x1.3		0,626	0,1598	Valid
x1.4		0,632	0,1598	Valid
x1.5		0,707	0,1598	Valid
x1.6		0,572	0,1598	Valid
x1.7		0,649	0,1598	Valid
x1.8		0,646	0,1598	Valid
x1.9		0,593	0,1598	Valid
x1.10		0,574	0,1598	Valid
x1.11		0,659	0,1598	Valid
x1.12		0,541	0,1598	Valid
Flexible Working Arrangement	x2.1	0,724	0,1598	Valid
	x2.2	0,776	0,1598	Valid
	x2.3	0,766	0,1598	Valid

	x2.4	0,783	0,1598	Valid
	x2.5	0,767	0,1598	Valid
Work/Life Balance	z1	0,571	0,1598	Valid
	z3	0,678	0,1598	Valid
	z4	0,758	0,1598	Valid
	z5	0,704	0,1598	Valid
	z6	0,689	0,1598	Valid
	z7	0,674	0,1598	Valid

Source: SPSS Output

Based on the results of the validity test of the instrument, all correlation values are greater than the r table value of 0.1598. Thus, the questions in these variables are valid and can be used as a data collection tool in this study.

### **3.2.2. Reliability Test**

Reliability Test, the instrument was used with the aim to determine the consistency of the instrument as a measuring

instrument, so that a measurement can be trusted. Cronbach alpha was used for the test. Where an instrument will be more reliable if the alpha coefficient is more than 0.60. The summary of the results of the questionnaire reliability test in accordance with the SPSS Output can be seen in the table below. Based on the table, it is known that the Cronbach alpha value of all variables is more than 0.6, so that the variables are reliable and suitable as a data collection tool.

**Table 3. Reliability Test Result**

Variable	Cronbach Alpha	Cut Off	Output
Employee Engagement	0,877	0,600	Reliable
Perceived Organizational Support	0,844	0,600	Reliable
Flexible Working Arrangement	0,820	0,600	Reliable
Work/Life Balance	0,761	0,600	Reliable

Source: SPSS Output

## **3.3 Respondent Perception**

### **3.3.1 Employee Engagement**

**Table 4. Respondents' Perception on Employee Engagement**

Item	Calculation	Respondents' Perception					Average
		SD	D	N	A	SA	
y1	Frequency	1	0	10	78	62	4,32

	Percentage	0,7%	0,0%	6,6%	51,7%	41,1%	
y3	Frequency	0	10	28	75	38	3,93
	Percentage	0,0%	6,6%	18,5%	49,7%	25,2%	
y4	Frequency	1	3	13	87	47	4,17
	Percentage	0,7%	2,0%	8,6%	57,6%	31,1%	
y5	Frequency	1	3	19	84	44	4,11
	Percentage	0,7%	2,0%	12,6%	55,6%	29,1%	
y6	Frequency	0	2	12	81	56	4,26
	Percentage	0,0%	1,3%	7,9%	53,6%	37,1%	
y7	Frequency	0	1	13	60	77	4,41
	Percentage	0,0%	0,7%	8,6%	39,7%	51,0%	
y8	Frequency	0	4	17	65	65	4,26
	Percentage	0,0%	2,6%	11,3%	43,0%	43,0%	
y9	Frequency	0	7	21	63	60	4,17
	Percentage	0,0%	4,6%	13,9%	41,7%	39,7%	
y10	Frequency	0	2	12	55	82	4,44
	Percentage	0,0%	1,3%	7,9%	36,4%	54,3%	
y11	Frequency	0	12	21	67	51	4,04
	Percentage	0,0%	7,9%	13,9%	44,4%	33,8%	
y12	Frequency	1	6	21	72	51	4,10
	Percentage	0,7%	4,0%	13,9%	47,7%	33,8%	
y13	Frequency	5	12	21	72	41	3,87
	Percentage	3,3%	7,9%	13,9%	47,7%	27,2%	
y14	Frequency	1	9	22	65	54	4,07
	Percentage	0,7%	6,0%	14,6%	43,0%	35,8%	
y15	Frequency	4	5	27	71	44	3,97
	Percentage	2,6%	3,3%	17,9%	47,0%	29,1%	
y16	Frequency	1	6	22	73	49	4,08
	Percentage	0,7%	4,0%	14,6%	48,3%	32,5%	
y17	Frequency	3	9	10	72	57	4,13
	Percentage	2,0%	6,0%	6,6%	47,7%	37,7%	
<b>Total</b>	<b>Frequency</b>	<b>18</b>	<b>91</b>	<b>289</b>	<b>1140</b>	<b>878</b>	<b>4,15</b>
	<b>Percentage</b>	<b>0,7%</b>	<b>3,8%</b>	<b>12,0%</b>	<b>47,2%</b>	<b>36,3%</b>	

Source: SPSS Output

Based on the results of the above data, it is known that the respondent's response to the Employee Engagement variable with 17 questions can be known by the following details: From 17 questions given to respondents, 18 times or 0.7%, the respondents chose strongly

disagree. 91 times or 3.8%, the respondents chose disagree. 289 times or 12.0%, the respondents chose neutral 1140 or 47.2%, the respondents chose agree, and 878 times or 36.3%, the respondents chose strongly agree. The average is 4.15 which means that

respondents tend to answer agree to the Employee Engagement variable.

### 3.3.2. Perceived Organizational Support

**Table 5. Respondent's Perception on Perceived Organizational Support**

Item	Calculation	Respondents' Perception					Average
		SD	D	N	A	SA	
x1.1	Frequency	0	0	14	105	32	4,12
	Percentage	0,0%	0,0%	9,3%	69,5%	21,2%	
x1.2	Frequency	1	0	17	91	42	4,15
	Percentage	0,7%	0,0%	11,3%	60,3%	27,8%	
x1.3	Frequency	0	0	23	92	36	4,09
	Percentage	0,0%	0,0%	15,2%	60,9%	23,8%	
x1.4	Frequency	0	1	23	87	40	4,10
	Percentage	0,0%	0,7%	15,2%	57,6%	26,5%	
x1.5	Frequency	0	0	20	87	44	4,16
	Percentage	0,0%	0,0%	13,2%	57,6%	29,1%	
x1.6	Frequency	0	4	30	78	39	4,01
	Percentage	0,0%	2,6%	19,9%	51,7%	25,8%	
x1.7	Frequency	0	0	10	106	35	4,17
	Percentage	0,0%	0,0%	6,6%	70,2%	23,2%	
x1.8	Frequency	0	0	32	71	48	4,11
	Percentage	0,0%	0,0%	21,2%	47,0%	31,8%	
x1.9	Frequency	0	0	14	85	52	4,25
	Percentage	0,0%	0,0%	9,3%	56,3%	34,4%	
x1.10	Frequency	0	4	29	86	32	3,97
	Percentage	0,0%	2,6%	19,2%	57,0%	21,2%	
x1.11	Frequency	0	1	15	92	43	4,17
	Percentage	0,0%	0,7%	9,9%	60,9%	28,5%	
x1.12	Frequency	0	1	13	87	50	4,23
	Percentage	0,0%	0,7%	8,6%	57,6%	33,1%	
<b>Total</b>	<b>Frequency</b>	<b>1</b>	<b>11</b>	<b>240</b>	<b>1067</b>	<b>493</b>	<b>4,13</b>
	<b>Percentage</b>	<b>0,1%</b>	<b>0,6%</b>	<b>13,2%</b>	<b>58,9%</b>	<b>27,2%</b>	

Source: SPSS Output

Based on the results of the above data it is known that the respondent's response to the Perceived Organizational Support variable with 12 questions can be described by the following details: From 12 questions given to respondents, 1 time

or 0.1%, the respondents chose strongly disagree. 11 times or 0.6%, the respondents chose disagree. 240 times or 13.2%, the respondents chose neutral 1067 or 58.9%, the respondents chose agree, and 493 times or 27.2%, the

respondents chose strongly agree. The average is 4.13 which means that respondents tend to answer agree to the Perceived Organizational Support

variable.

### **3.3.3. Flexible Working Arrangement**

**Table 6. Respondents' Perception on Flexible Working Arrangement**

Item	Calculation	Respondent's Perception					Average
		SD	D	N	A	SA	
x2.1	Frequency	0	3	12	111	25	4,05
	Percentage	0,0%	2,0%	7,9%	73,5%	16,6%	
x2.2	Frequency	0	4	17	99	31	4,04
	Percentage	0,0%	2,6%	11,3%	65,6%	20,5%	
x2.3	Frequency	0	1	15	107	28	4,07
	Percentage	0,0%	0,7%	9,9%	70,9%	18,5%	
x2.4	Frequency	0	0	16	101	34	4,12
	Percentage	0,0%	0,0%	10,6%	66,9%	22,5%	
x2.5	Frequency	0	0	16	93	42	4,17
	Percentage	0,0%	0,0%	10,6%	61,6%	27,8%	
<b>Total</b>	<b>Frequency</b>	<b>0</b>	<b>8</b>	<b>76</b>	<b>511</b>	<b>160</b>	<b>4,09</b>
	<b>Percentage</b>	<b>0,0%</b>	<b>1,1%</b>	<b>10,1%</b>	<b>67,7%</b>	<b>21,2%</b>	

Source: SPSS Output

Based on the results of the above data, it is known that the respondent's response to the Flexible Working Arrangement with 5 questions can be described by the following details: From 5 questions given to respondents, 0 times or 0.0%, the respondents chose strongly disagree. 8 times or 1.1%, the respondents chose to disagree.

76 times or 10.1%, the respondents chose neutral, 511 or 67.7%, the respondents chose to agree, and 160 times or 21.2%, the respondents chose strongly agree. The average is 4.09 which means that respondents tend to answer agree with the Flexible Working Arrangement variable.

### **3.3.4. Work/Life Balance**

**Table 7. Respondents' Perception of Work/Life Balance**

Item	Calculation	Respondents' Perception					Average
		SD	D	N	A	SA	
z1	Frequency	0	3	11	84	53	4,24
	Percentage	0,0%	2,0%	7,3%	55,6%	35,1%	
z3	Frequency	0	3	14	101	33	4,09
	Percentage	0,0%	2,0%	9,3%	66,9%	21,9%	
z4	Frequency	0	1	14	89	47	4,21

	Percentage	0,0%	0,7%	9,3%	58,9%	31,1%	
z5	Frequency	0	0	6	91	54	4,32
	Percentage	0,0%	0,0%	4,0%	60,3%	35,8%	
z6	Frequency	0	0	5	88	58	4,35
	Percentage	0,0%	0,0%	3,3%	58,3%	38,4%	
z7	Frequency	0	1	9	80	61	4,33
	Percentage	0,0%	0,7%	6,0%	53,0%	40,4%	
<b>Total</b>	<b>Frequency</b>	<b>0</b>	<b>8</b>	<b>59</b>	<b>533</b>	<b>306</b>	<b>4,25</b>
	<b>Percentage</b>	<b>0,0%</b>	<b>0,9%</b>	<b>6,5%</b>	<b>58,8%</b>	<b>33,8%</b>	

Source: SPSS Output

Based on the results of the above data it is known that the respondent's response to the Work/Life Balance variable with 7 questions can be known by the following details: From 7 questions given to respondents, 0 times or 0.0%, the respondents chose strongly disagree. 8 times or 0.9%, the respondents chose to disagree. 59 times or 6.5%, the respondents chose neutral 533, or 58.8%, the respondents chose to agree, and 306 times or 33.8%, the respondents chose strongly agree. The average is 4.25 which means that respondents tend to answer agree with the Work/Life Balance variable.

### 3.3. Path Analysis

Influence analysis of Perceived Organizational Support, Flexible Working Arrangement on Employee Engagement and Work/life Balance as a variable was carried out using path analysis. Before the path analysis was carried out, the classic assumption must be tested using Ordinary Least Square (OLS).

### 3.3.5. Classic Assumption Test

#### 3.4.1.1. Multicollinearity Assumption

The multicollinearity test was intended to determine whether there are relationships between independent variables. In path analysis, there is no connection between independent variables. The multicollinearity test is done by looking at the VIF value of each independent variable. The testing criteria stated that if the VIF value is less than 10 then there are no multicollinear symptoms. The summary of the results of multicollinearity testing can be seen in table 8.

Based on the results in the table above, it can be seen that all the independent variables in the Z and Y models produce VIF values that are smaller than 10. Thus, it can be concluded that the model is stated to have no symptoms of multicollinearity. So that the assumption of multicollinearity is fulfilled.

**Table 8. Collinearity Statistics table – Multicollinearity test**

Independent Variable	VIF	
	Z Model	Y Model
Perceived Organizational Support	2,028	2.42
Flexible Working Arrangement	2,028	2.213
Work-life Balance		2.024

Source: SPSS Output

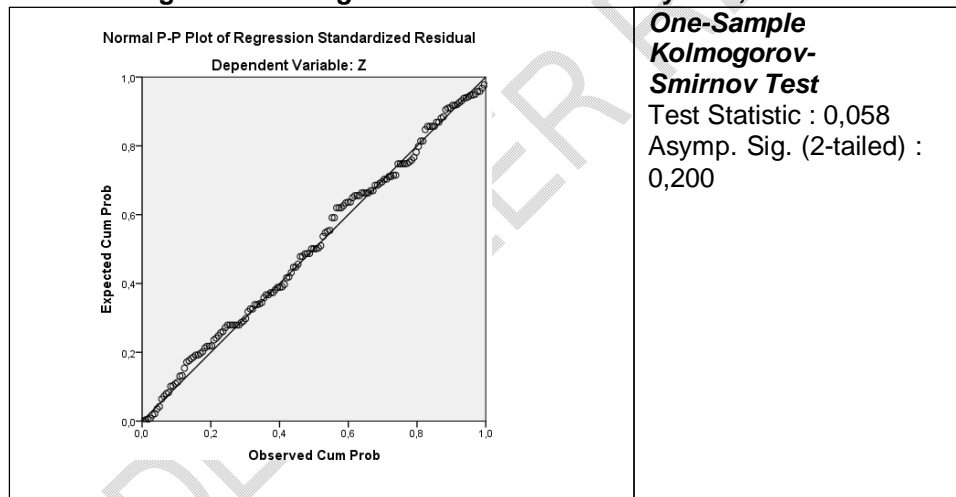
### 3.4.1.2. Normality Assumption

The normality assumption test aims to test whether the residual variable regression model is normally distributed or not. In the path analysis, the residual is expected to be normally distributed. To test whether the residuals are normally distributed or not, it can be seen through the Kolmogorov-Smirnov test. The hypothesis testing of the normality assumption is as follows:

$H_0$  : Residuals are normally distributed  
 $H_1$ : Residual is not normally distributed

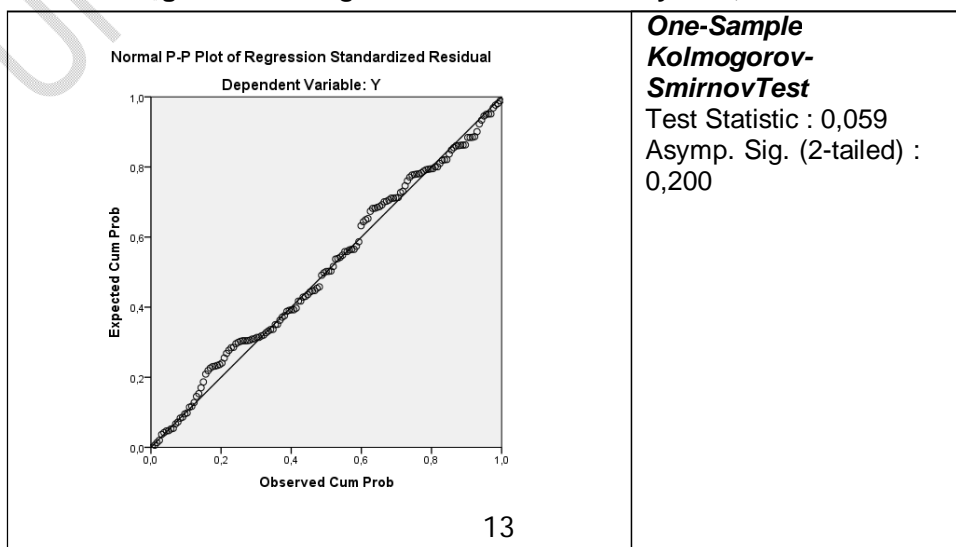
The testing criteria stated that if the Kolmogorov-Smirnov probability value is greater than the 5% alpha significance value or 0.05, the residuals are normally distributed. The following is the result of testing the assumption of normality through the Kolmogorov-Smirnov test:

**Figure 1. Kolmogorov Smirnov – Normality Test, Z Model**



Source: SPSS Output

**Figure 2. Kolmogorov Smirnov –Normality Test, Y Model**



Source: SPSS Output

Based on the normality assumption test in the Z and Y models produced the statistical probability of the *Kolmogorov Smirnov* test with a value greater than the significant alpha value of 5% or 0.05 and also on the results of the Probability plot produced plots close to the diagonal line, so  $H_0$  is accepted. This means that the residuals are stated to be normally distributed. Thus, the normality assumption is fulfilled.

#### 3.4.1.3. Heteroscedasticity Assumption

The heteroscedasticity assumption test was used to find out whether the residual has a homogeneous variety or not. In path analysis, it is expected that residuals have a homogeneous variety. The assumption of heteroscedasticity can be seen through the Glejser Test. The hypothesis testing the assumption of

heteroscedasticity is as follows:

$H_0$ : Residual has a homogeneous variety

$H_1$ : Residual does not have a homogeneous variety

The test criteria stated that if all the probability values of the independent variables significant level of significance ( $\alpha = 5\%$ ) then the residuals are stated to have a homogeneous variety. The following is the result of the heteroscedasticity assumptions test through the Glejser Test:

The heteroscedasticity assumption test shows that all the independent variables in the Z and Y models produce a probability greater than the level of significance ( $\alpha = 5\%$  or 0.05). This means that the residuals are stated to have a homogeneous variety. Thus, the assumption of heteroscedasticity is fulfilled

**Table 9. Glejser Test – Heteroscedasticity test**

Independent Variable	Z Model		Y Model	
	T Statistics	Prob.	T Statistics	Prob.
Perceived Organizational Support	-0,580	0,563	1.067	0.288
Flexible Working Arrangement	-0,136	0,892	-0.727	0.468
Work/Life Balance			-0,236	0,814

Source: SPSS Output

#### 3.4.1.4. Autocorrelation Assumption

The autocorrelation assumption test was intended to determine whether the observation/series residuals were correlated or not. Autocorrelation assumptions test was expected that residual observation is not correlated with each other. The assumption of autocorrelation testing was done using the *Durbin Watson* test. The testing criteria stated that if the Durbin Watson (DW) test

value is at  $dU - (4-dU)$  then the regression equation does not contain autocorrelation or residual problems are not correlated or related. Autocorrelation testing criteria can be seen in the table 10. Based on the summary on the table above, the Durbin Watson (DW) value of each model is 1,862 and 1,968, where the value is in the criteria  $dU - (4-dU)$ . Thus, the residuals generated from the regression equations that have been estimated are stated to have no autocorrelation.

**Table 10. Dubrin Watson limit**

DW Value		Output
<dL	<1.7207	There is autocorrelation
dL – dU	1.7207 – 1.7609	No conclusion
dU – (4-dU)	1.7609 – 2.2391	There is no autocorrelation
(4-dU) - (4-dL)	2.2391 – 2.2793	No Conclusion
>(4-dL)	> 2.2793	There is autocorrelation

Source : SPSS Output

### 3.4.2. Goodness of Fit Model

Goodness of fit model is used to determine the magnitude of the diversity of exogenous variables in explaining the diversity of endogenous variables, or in other words to determine the magnitude of the contribution of exogenous variables

to endogenous variables. The goodness of fit model in Path analysis is carried out using the Total Determination Coefficient ( $R^2$ ). The results of the Goodness of fit Model are summarized in the following table;

Table 11. Goodness of fit Model

Model	$R^2$
Z Model	0.506
Y Model	0.482
$R^2_{\text{m}} = 1 - ((1 - R^2_Z) * (1 - R^2_Y))$ $R^2_{\text{m}} = 1 - ((1 - 0.506) * (1 - 0.453)) = 0.744$	

Source: SPSS Output

The R-square on the Z model is 0.506 or 50.6%. It shows that the diversity of Work/Life Balance can be explained by Perceived Organizational Support, and Flexible Working Arrangement as much as 50.6%, or in other words the contribution of Perceived Organizational Support, and Flexible Working Arrangement towards Work/life Balance are 50.6%, while the remaining amount 49.4% is the contribution of other variables that did not address in this study.

The R-square on the Y model is 0.482 or 48.2%. It shows that Work/life Balance can explain the diversity of Employee Engagement as much as 48.2%, or in other words, the contribution of Work/Life Balance to Employee Engagement is 48.2%, while the remaining 51.7% is the contribution of

other variables that did not address in this study.

Based on the table above, the total determination coefficient ( $R^2$ ) is 0.744 or 74.4%. It shows that the Employee Engagement diversity can be explained by the overall model as much as 74.4%, or in other words, the contribution of Perceived Organizational Support, Flexible Working Arrangement, and Work/Life Balance as a whole to Employee Engagement is 74.4%, while the rest of 25.6% is the contribution of other variables that did not address in this study.

### 3.4.3 Hypothesis Testing

A significant test was used to test the hypothesis of whether or not there is a partial influence of exogenous variables on endogenous variables. The criteria

testing state that if the probability value < level of significance (alpha =  $\alpha$ ) then it can be stated there is a partial effect of

exogenous variables on endogenous variables. The significant test can be seen through the summary in the following table

**Table 12. Hypothesis Testing**

Model	Exogenous	Endogenous	Coef.	T	Prob.	R <sup>2</sup>
$Z = \beta_1 X_1 + \beta_2 X_2 + \epsilon$	Perceived Organizational Support	Work/life Balance	0,463	5,630	0,000	0,506
	Flexible Working Arrangement	Work/life Balance	0,303	3,678	0,000	
$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + \epsilon$	Perceived Organizational Support	Employee Engagement	0,174	1,873	0,063	0,482
	Flexible Working Arrangement	Employee Engagement	0,087	0,980	0,329	
	Work/life Balance	Employee Engagement	0,500	5,924	0,000	

Source: SPSS Output

The Indirect Influence of Perceived Organizational Support on Employee Engagement through Work/Life Balance is presented as follows;

Indirect Coefficient =  $0,463 \times 0,500 = 0,232$

Total influence =  $0,174 + 0,232 = 0,406$

The indirect influence of Flexible Working Arrangement on Employee Engagement through Work/Life Balance is presented as follow;

Indirect Coefficient =  $0,303 \times 0,500 = 0,152$

Total Influence =  $0,087 + 0,152 = 0,239$

Hypothesis 1, Perceived Organizational Support on Work/Life Balance produces T statistics values of 5.630 with a probability of 0.000. The test results show that the probability <math>\alpha</math> (5%). It means that there is a significant direct influence of Perceived Organizational Support on Work/life Balance. Thus hypothesis 1 is accepted. The direct influence coefficient of Perceived Organizational Support on Work/Life Balance is 0.463. It shows that Perceived Organizational Support has a positive and significant effect on Work/life Balance. Thus, it can be interpreted that

increasing Perceived Organizational Support, it tends to increase Work/life Balance.

Hypothesis 2, the influence of a Flexible Working Arrangement on Work/Life Balance generates T statistics value of 3.678 with a probability of 0.000. The test results show that the probability <math>\alpha</math> (5%). It means that there is a significant direct influence of Flexible Working Arrangements on Work/Life Balance. Thus hypothesis 2 is accepted. The direct influence coefficient of Flexible Working Arrangements on Work/Life Balance is 0.303. It shows that Flexible Working Arrangements have a positive and significant influence on Work/life Balance. Thus, it can be interpreted that the increasing Flexible Working Arrangement is likely to increase Work/Life Balance.

Hypothesis 3, the influence of Work/Life Balance on Employee Engagement. generate T statistics values of 5.924 with a probability of 0.000. The test results show that the probability <math>\alpha</math> (5%). It means that there is a significant direct influence of Work/Life Balance on Employee Engagement. Thus, hypothesis

3 is accepted. Work/life Balance's direct influence coefficient on Employee Engagement is 0.500. It shows that Work/life Balance has a positive and significant influence on Employee Engagement. Thus, it can be interpreted that the increasing work/life balance tends to increase employee engagement.

Hypothesis 4, the influence of Perceived Organizational Support on Employee Engagement mediated by Work/Life Balance generates an indirect influence coefficient  $>$  direct influence coefficient. It means that there is a significant influence of Perceived Organizational Support on Employee Engagement through Work/life Balance. Thus, hypothesis 4 is accepted. The Influence coefficient of Perceived Organizational Support on Employee Engagement through Work/Life Balance is 0.232. This shows that Perceived Organizational Support has a positive and significant influence on Employee Engagement through Work/Life Balance. Thus, it can be interpreted that in order to improve Work/Life Balance by applying Perceived Organizational Support will tend to increase Employee Engagement.

Hypothesis 5, the influence of the Flexible Working Arrangement on Employee Engagement mediated by Work/Life Balance generates an indirect influence coefficient  $>$  direct influence coefficient. It means that there is a significant influence on the Flexible Working Arrangement of Employee Engagement through Work/Life Balance. Thus, hypothesis 5 is accepted. The influence coefficient of Flexible Working Arrangements on Employee Engagement through Work/life Balance of 0.152. This shows that Flexible Working Arrangements have a positive and significant influence on Employee Engagement through Work/life Balance. Thus, it can be interpreted that in order to improve Work/Life Balance by applying Flexible Working Arrangements will tend to increase Employee Engagement.

### 3. CONCLUSION

The results of this study proved that the influence of perceived organizational support on work/life balance was positive and significant, so the first hypothesis can be accepted. This research is also in line with the research conducted by Bakker & Demerouti [28] which assumed that organizational support can be a resource to fulfill the demands imposed by two of the most dominant factors which are work and life. Therefore, it is necessary for an organization to build organizational support for its employees especially Millennial because employees tend to develop global beliefs about the extent to which their employing organization both respects their contributions and cares about their well-being [11].

The test results of the second hypothesis state that there is a positive significant influence of flexible working arrangements on work/life balance. This proves the previous research conducted by Thomson [29] that flexible working arrangements have been introduced as a benefit for parent/caring employees in order to help them fulfilling work and life responsibilities and achieve work/life balance. According to a recent work-life balance survey, employees believe that flexible working practices improve workplace morale, which may positively influence work-life balance; additionally, employees believe that employers can assist them to balance their work and life personal life [13]. In addition, the flexible working arrangement is one of the best activities to increase employee well-being, as it helps the employee deal with responsibilities outside the work [30].

The results of the third hypothesis proved that there is a positive and significant influence between work/Life balance and employee engagement. This is consistent with previous research that examines the relationship between work-life balance practices, which are related to work-life balance, and engagement. The

relationship between work-life balance practices and employee engagement can be explained using the social exchange theory [31]. This theory states that when employers provide care and opportunities for their employees, these employees will show certain attitudes and behavior. More specifically, when employees receive the favorable treatment they reciprocate, which in turn leads to beneficial outcomes for both employers and employees and one of the outcomes would be employee engagement [32].

The result of the fourth hypothesis shows that perceived organizational support has a positive and significant influence on employee engagement through work/life balance as a mediating variable. So, it can be interpreted that creating the Work/Life Balance for the Millennials by giving them organizational support will tend to increase employee engagement. This supports the theory that stated if organizational support was perceived by the employees, then they will believe that the organization will fulfill their work and private life and they will think that they are obligated to repay the organization. According to the principle of reciprocity, only when employees perceive support and care from the organization they will give positive employee engagement, organizational commitment, and contribution and make active attitudes or behavior changes in order to make effort to achieve organizational goals [33]. The result of the fifth hypothesis proved flexible working arrangement has a positive and significant influence on employee engagement through work/life balance as a mediating variable. Thus, it can be interpreted that creating a work/life balance by applying flexible working arrangements as a part of human resource practices will tend to increase employee engagement among millennials. Considering the previous study by Shockley and Allen [34] named one of the flexible work arrangements used: life management motives. Life management motives are consistent with the reason for flexible work arrangements creation – that

is to help employees to manage both work and personal life at the same time. However, researchers also found that flexible working arrangements not only allow employees to balance work and personal life responsibilities but also bring other benefits to organizations and employees at the same time. For example, scholars provided evidence that organizations which offer flexible work arrangements are more likely to have employees with higher job satisfaction and lower turnover intentions, and possibly a good engagement [35]. Based on those explanations it can be interpreted that in order to create the engagement of the employee, the organization must consider creating work/life balance policies.

## REFERENCES

1. Kanste. Work engagement, work commitment and their association with wellbeing in health care. *Scand J Caring Sci.* 2011; 25(4):754-761.  
DOI: 10.1111/j.1471-6712.2011.00888.x
2. Pitt-Catsoupes & MatzCosta. The multi-generational, workforce: Workplace flexibility and Engagement. *Community, Work, & Family.* 2011; 11(2), 215–229.  
DOI:  
<https://doi.org/10.1080/13668800802021906>
3. Kortt, M.D. The relationship between work-life balance, work engagement and participation in employee development activities: A moderated; 2016.
4. Reindl, C. U., Kaiser, S., & Stolz, M. L. Integrating professional work and life: Conditions, outcomes, and resources. In S. Kaiser, M.

- Ringlstetter, D. R. Eikhof, & M. P. E. Cunha (Eds.). Creating a balance? International perspectives on the work-life balance integration of professionals. Heidelberg, Germany: Springer Berlin Heidelberg; 2011.
5. Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of vocational behavior*. 2005; 66 (1): 125-197.  
DOI:  
<https://doi.org/10.1016/j.jvb.2003.11.003>
  6. Whittington, J. L., Maellaro, R., Galpin, T. Redefining success: The foundation for creating work-life balance. Heidelberg, Germany. Springer Berlin Heidelberg; 2011.
  7. Baltes, B., Briggs, T.E., Huff, J.W., Wright, J.A., & Neuman, G.A. (1999). Flexible and compressed workweek schedules: a meta-analysis of their effects on work-related criteria. *Journal of Applied Psychology*. 1999; 84 (4): 496-513.  
DOI:[10.1037/0021-9010.84.4.496](https://doi.org/10.1037/0021-9010.84.4.496)
  8. Greenhaus, J. H., Collins, K. M., & Shaw, J. D. The relation between work-family balance and quality of life. *Journal of vocational behavior*. 2003; 63 (3): 510-531.  
DOI:  
[https://doi.org/10.1016/S0001-8791\(02\)00042-8](https://doi.org/10.1016/S0001-8791(02)00042-8)
  9. Harrington, B., & Ladge, J.J. (2009). Work-life integration: Present dynamics and future directions for organizations. *Organizational dynamics*. 2009; 38 (2): 148-157.  
DOI:[10.1016/J.ORGADYN.2009.02.003](https://doi.org/10.1016/J.ORGADYN.2009.02.003)
  10. Thakur, Aditi & Kumar, Narsingh. 2015. The Effect of Perceived Organizational Support, Role Related Aspects and Work Involvement on Work-Life Balance: Self Efficacy as a Moderator. *International Journal of Scientific and Research Publications*. 2015; 5 (1): 2250-3153.
  11. Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. 1986. Perceived organizational support. *Journal of Applied Psychology*. 1986; 71 (3), 500–507.  
DOI:  
<https://doi.org/10.1037/0021-9010.71.3.500>
  12. Hill, E.J., Hawkins, A.J., Ferris, M., & Weitzman, M. (2001). Finding an Extra Day a Week: The Positive Influence of Perceived Job Flexibility on Work and Family Life Balance. *Family Relations*. 2001; 50 (1): 49-58.  
DOI:  
<https://psycnet.apa.org/doi/10.1111/j.1741-3729.2001.00049.x>
  13. Tipping, S. Chanfreau, J. Perry, J. and Tait, C. The Fourth Work-Life Balance Employee Survey. London. Department for Business, Innovation and Skills (BIS); 2012.
  14. Ahmadi, S. A., Tavakoli S. & Heidary P. P. Perceived organizational support and employee engagement. *International Journal of Information Technology and Management Studies*. 2014; 1 (1): 615-621.

15. Solnet D. & Kralj A. (2011). The influence of perceived organizational support on engagement: A cross-generational investigation in the hospitality industry. *International CHRIE Conference-Refereed Track*; 2011: 9. 65-75.
16. Richman, A.M., Civian, J.T., Shannon, L.L., Hill, E.J., & Brennan, R.T. The relationship of perceived flexibility, supportive work-life policies, and use of formal flexible arrangements and occasional flexibility to employee engagement and expected retention. *Community, Work & Family*. 2008; 11 (2): 183- 197  
DOI:10.1080/13668800802050350
17. Johnson, A.A., Shannon, L.L., & Richman, A.L. Challenging common myth about workplace flexibility: Research notes from the multi-organization database. *Community, Work & Family*. 2008; 11 (2): 231-242.  
DOI:  
<https://doi.org/10.1080/13668800802048321>
18. Timms C., Brough. P., O'Driscoll M., Kalliath T., Siu O. L., Sit C., and Lo, D. Flexible work arrangements, work engagement, turnover intentions, and psychological health. *Asia Pacific Journal of Human Resources*. 2013; 53 (1): 83–103  
DOI:  
<https://doi.org/10.1111/1744-7941.12030>
19. Baer K. E.B . The Relationship Between Perceptions and Actual Use of Workplace Flexibility and Employee Engagement. Thesis. The Faculty of the Department of Psychology San José State University; 2017.
20. Christiana, D. Analisa Pengaruh *Flextime* dan *Total Returns* Terhadap *Employee'Engagement* dengan Status Kekaryawanan dan Gender Sebagai Variabel Moderator (Studi Kasus Pada PT. Formulatrix Indonesia). Thesis. The Faculty of Economic and Bussiness Satya Wacana Christian University; 2014.
21. Hewitt associates. 2012. Employee Engagement: recent insights from Aon Hewitt's global research.  
[http://www.aon.com/unitedkingdom/attachments/thoughtleadership/globalemployeeengagementfullreport.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwic\\_LWUt8DaAhWMIlwKHZB8C7gQFggUMAA&usq=AOvVawOPsPMHikB71A-rdmYFXEXU](http://www.aon.com/unitedkingdom/attachments/thoughtleadership/globalemployeeengagementfullreport.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwic_LWUt8DaAhWMIlwKHZB8C7gQFggUMAA&usq=AOvVawOPsPMHikB71A-rdmYFXEXU) (accessed on 21<sup>st</sup> of February 2018)
22. Twenge, J.M. A Review of the Empirical Evidence on Generational Differences in Work Attitudes. *Journal of Business and Psychology*. 2010; 25 (2): 201-210.  
DOI:  
<https://doi.org/10.1007/s10869-010-9165-6>
23. Marshall M.N. Sampling for qualitative research. *Family practice. An International Journal*. 1996; 6, 522 – 525.
24. Myers, K. Millennials in the Workplace: A Communication Perspective on Millennials' Organizational Relationships and Performance. *Journal of Business and Psychology*. 2010; 25 (2): 225- 238.  
DOI: 10.1007/s10869-010-9172-7
25. Robinson, O.C. Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*. 2014; 11 (1): 25-41.

- DOI:  
<https://doi.org/10.1080/14780887.2013.801543>
26. Martin, W. E. & Bridgmon, K. D. Quantitative and statistical research methods: From hypothesis to results. San Francisco, CA: Jossey-Bass; 2012.
  27. Yang, K., & Banamah, A. Quota sampling as an alternative to probability sampling? An experimental study. *Sociological Research Online*. 2014; 19 (1): 29-49.  
DOI:  
<https://doi.org/10.5153/sro.3199>
  28. Bakker, A.B and Demerouti, E. The job demands-resources model: state of the art. *Journal of Managerial Psychology*. 2007; 22 (3) : 309–328  
DOI:  
<https://doi.org/10.1108/02683940710733115>
  29. Thomson, P. The business benefits of flexible working. *Strategic HR Review*. 2008; 7: (2): 17-22.  
DOI: <https://doi.org/10.1108/14754390810853129>
  30. Pruyne, E., Powell. and Parsons, J. *Developing a Strategy for Employee Wellbeing: A Framework for Planning and Action*. Ashridge Business School, Nuffield Health; 2012.
  31. Blau, P. M. *Exchange and power in social life*. New Brunswick, NJ: John Wiley & Sons, Inc; 1964.
  32. Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of applied psychology*. 2002; 87 (3): 565-573.  
DOI:  
<https://doi.org/10.1037/0021-9010.87.3.565>
  33. Kailiang D and Xinyu, Q. Perceived Organizational Support and Employee Engagement: Based on the Research of Organizational Identification and Organizational Justice. *Open Journal of Social Sciences*, 2016; 4 (12): 46-57.  
DOI: 10.4236/jss.2016.412005
  34. Shockley, K.M., & Allen, T.D. Motives for flexible work arrangement use. *Community, Work & Family*. 2012; 15 (2): 217-231.  
DOI:  
<https://doi.org/10.1080/13668803.2011.609661>
  35. Mcnall, L. A., Masuda, A. D., & Nicklin, J. M. Flexible work arrangements, job satisfaction, and turnover intentions: the mediating role of work-to-family enrichment. *The Journal of Psychology*. 2010; 144 (1) : 61-81.  
DOI:  
<https://doi.org/10.1080/00223980903356073>