

WORK STRESS AS A MEDIATING ROLE BETWEEN JOB CRAFTING AND EMPLOYEE ENGAGEMENT: EVIDENCE FROM A LEADING IT ORGANIZATION IN SRI LANKA

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ABSTRACT

The main aim of this study is to determine the impact of job crafting on employee engagement by investigating the mediating effect of work stress in the relationship between job crafting and employee engagement in a leading IT organization in Sri Lanka. A Google Form was used to collect the data. The sample was chosen using a simple random sampling technique, with 132 employees from the selected IT organization in Sri Lanka as the sample size. The data were analyzed using the correlation, regression, and Sobel test, where most of the analyses were done with the aid of SPSS. It was found that there is a significant positive moderate impact from job crafting on work engagement and a weak negative relationship between job crafting and work stress and between work stress and work engagement.

Additionally, this study has revealed that work stress significantly mediates the relationship between job crafting and work engagement as a partial mediator. Finally, it is concluded that the IT organizations can reduce their employees' work stress by successfully implementing the job crafting concept within their organization, which will directly affect the employee engagement to improve further. Managers should foster a supportive environment where employees can interact and add more valuable tasks to their daily responsibilities.

Keywords: *Job crafting, Work stress, Work engagement*

1. Introduction

1.1 Background of the Study

The work environment is critical for employees to succeed in the organization. As a result, employees must create a work environment that allows them to meet their personal and professional goals. It is important to know how employees create a resourceful work environment for themselves due to the changes in the organization. Employees, for example, do not have enough space to interact face to face with their colleagues due to teleworking (Golden, Veiga & Dino, 2008). As a result, employees must hold meetings to access their social resources. Furthermore, it demonstrates that individuals now bear responsibility for their careers (Grant & Parker, 2009).

Previous research findings showed that management could impact the employees' job demands and resources (Piccolo & Colquitt, 2006; Nielsen Randall, Yakker & Brenner, 2008). Also, management can indirectly impact employee engagement and performance (Harter Schmidt & Hayes, 2002). However, sometimes managers are not always there to provide feedback. Moreover, management involvement can be perceived as a more expensive and time-consuming factor (Dugdill & Springett, 1994). So it is important to assemble their job challenges and resources by the employee. Therefore, by performing as a proactive employee, both organizations and the employees can gain benefits, maintaining competitive advantages in a dynamic market (Wagner & Hollenbeck, 2015).

The definition of proactive personality is "the constant propensity to influence environmental change" (Bateman & Crant, 1993, pp 103). Furthermore, proactive employees who adjust their job demands and resources to best suit their needs and requirements can benefit organizations (Parker, Williams, & Turner, 2006). Job crafting reflects a proactive personality that does not encourage negative appraisals, such as loss, and tries to put effort into resource development (Schwarzer & Knoll, 2003). Job crafting considers future job demand and resources as a personal challenge in the job rather than a threat (Angelo & Chambel, 2014). As a result, job crafting is a process in which employees use proactive behaviors to change the constraints of their respective jobs (Wrzesniewski & Dutton, 2001). Previous research revealed that the job crafting concept is aimed at employee job redesign (Wrzesniewski & Dutton, 2001) and that employees solely modify their aspects of jobs to develop a fit between the job's characteristics and their own needs, abilities, and preferences (Berg, Dutton & Wrzesniewski, 2008).

In relation to Wrzesniewski and Dutton (2001), employees can practice three types of job changes. First, the employee may craft the task he or she needs to accomplish at work. Second, the employee may craft interpersonal relationships in the workplace. Third, the employee may craft their cognitive attitude towards their job. For that, the employee needs to see his or her job from a positive approach. Here the views towards the job are changed not the task but as a meaningful one and also help the employee to engage more in his/her job (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). However, a recent study showed that disengaged employees might decline a company's productivity or increase absenteeism and turnover (Gallup study, 2014). So due to that reason, most the professional managers and academic researchers are putting their higher attention on that how to keep the workforce engaged in improving the outcomes of the business and reducing the labor cost (Kahn, 1990; Saks, 2006; Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). Employee behavior and attitudes significantly impact organizational competitiveness and innovation (Ramamoorthy, Flood, Slattey, & Sardesai, 2005). So, firms are trying to understand those factors that will help increase employee innovation and proactive behavior, such as job crafting (Sharma & Nambudiri, 2020). Though firms are trying to understand those factors, very few studies have contributed to the theory related to employee work engagement in the Information Technology (IT) industry (Sharma & Nambudiri, 2020). Moreover, the previous studies confirm that IT industry employees face huge work stress due to heavy workload and a poor working environment (Subikshaa & Jasmine, 2018). In addition, previous findings showed a negative relationship between work stress and work engagement (Bakker, van Veldhoven & Xanthopoulou, 2010; Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004).

To fill this empirical gap, this study has raised to focus on assessing the impact of job crafting on the work engagement of employees in the IT industry of Sri Lanka and the role of work stress in the relationship between job crafting and work engagement of employees in IT industry of Sri Lanka.

1.2 Problem Statement

The IT industry of Sri Lanka is a significant industry, which has provided 22,148 (Million) contributions to the gross national income of Sri Lanka in 2018 (Central Bank, 2019). IT industry employees face many unfavorable consequences due to the lack of studies regarding their work engagement (Sharma & Nambudiri, 2020) and huge work stress (Subikshaa & Jasmine, 2018). The health problems are the main

unfavorable consequences which are facing because of the huge work stress by the employees of the IT industry, and those health problems are acid peptic disease, alcoholism, asthma, diabetes, fatigue, tension headache, hypertension, irritable bowel syndrome, sexual dysfunction and skin diseases such as psoriasis, lichen planus, urticaria, pruritus, neurodermatitis, etc. (Padma, Anand, Gurukul, Javid, Prasad, & Arun, 2015). A Previous study which is done by taking a sample of 1000 IT employees in Chennai has confirmed that around 56% had musculoskeletal symptoms, 10% had diabetes, 54% had depression, 22% had newly diagnosed hypertension, 36% had dyslipidemia, and 40% had obesity (Padma et al., 2015). However, the studies confirmed that job crafting could reduce the work stress faced by employees in some industries (Sulsky & Smith, 2005).

Hence this study will focus on the impact of job crafting on employees' work engagement, and considering the above evidence, the following research question can be derived as follows.

1. What is the impact of job crafting on work engagement?
2. What is the role of work stress in the relationship between job crafting and work engagement of employees?

2. Literature Review

2.1 Work Engagement

Highly engaged employees willingly put more effort into their assigned tasks, are innovative and creative in problem-solving, and demonstrate enthusiasm and initiative at work. Work engagement is "a positive, fulfilling, work-related mindset characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002, pp 74). According to Schaufeli and Bakker (2004, pp 295), work engagement is "a positive, work-related frame of mind characterized by high levels of energy and dedication to one's work."

According to Schaufeli and Bakker (2004), there are three dimensions of work engagement: vigor, dedication, and absorption. Schaufeli et al. (2002) defined each dimension of work engagement as follows: 1) Vigor: a type of employee mindset that is characterized by feeling energetic, willing to put in more effort at work, and the feeling of continuing to work even when it appears difficult, 2) Dedication: the employees' enthusiasm that is triggered by seeing their work as meaningful, challenging, and inspiring. 3) Absorption: This is the employee's engrossment in work to the point where he or she is unwilling to leave the workplace despite the time.

Bakker and Demerouti (2007) and De Beer, Rothmann and Pienaar (2012) demonstrated that if employees' work engagement is low, it can lead to several negative outcomes for the organization, including decreased commitment, lower productivity, and increased employee turnover intention. Furthermore, previous research has shown that work engagement helps employees deal effectively with stressful work demands' (Britt, Adler, & Bartone, 2001). Furthermore, engaged employees can develop warm, trusting relationships with their coworkers and develop and grow as individuals (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2010).

2.2 Job Crafting

According to Slemp and Vella-Brodrick (2013), job crafting is changing the social, physical, or cognitive aspects of one's job. Wrzesniewski and Dutton (2001) also stated that job crafting is an employee's proactive behavior used to change the boundaries of their job. Furthermore, according to Schwarzer and Knoll (2003), job crafting is a proactive mechanism that does not result in negative appraisals, such as loss, and demonstrates the effort to build up resources. Angelo and Chambel (2014) also demonstrated job crafting as a proactive mechanism because it predicts future demand and resource opportunities as a personal challenge rather than a threat by increasing job challenges. As a result, job crafting can be identified as a mechanism that will assist the organization in achieving its desired goals and objectives.

According to Grant and Ashford (2008) and Griffin, Neal, and Parker (2007), job crafting occurs when employees initiate changes to their jobs instead of responding to the changes in the job. Tims et al. (2012) stated that salaried employees and opportunity employees could engage in job crafting. Further, previous studies confirmed that the job crafting concept could be applied and so valuable for the IT industry where employees deal with a high level of innovation (Sharma & Nambudiri, 2020).

2.3 Work Stress

According to Lazarus (1966), stress is a condition in which people believe that their personal and social resources are insufficient. Stress is caused by environmental, organizational, and individual variables (Matteson & Ivancevic, 1999; Cook & Hunsaker, 2001). Carson and Kuipers (1998) demonstrated that the stress response could be classified into three levels. The first level is known as stressors, and external sources cause it. Specific work stressors for this level include high job demands, a lack

of resources, and support from supervisors and colleagues. Some variables in the second level protect individuals from the negative effects of stress. This level includes both the positive and negative effects of stress. Quick, Quick, Nelson, and Hurrell (1997) defined occupational stress, workplace stress, work stress, and role stress as branches of stress, a complex psychological concept that people may encounter daily.

2.4 Relationship among Job Crafting, Work Engagement, and Work Stress.

Several authors have identified numerous outcomes from using the job crafting model. They are better performance (Worline, Wrzesniewski, & Rafaeli, 2002); employee initiative, persistence, and action (Crant, 1995); colleague ratings of in-role performance (Bakker et al., 2012); Person–environment fit and consequent lower work stress (Sulsky & Smith, 2005).

Furthermore, Bakker and Demerouti (2008) demonstrated a feedback loop in the work engagement model from work engagement to job resources via job crafting. As a result, job crafting can help to increase work engagement. According to Bakker et al. (2012), Petrou, Demerouti, Peeters, Schaufeli, and Hetland (2012), and Tims et al. (2013). Work engagement, on the other hand, may encourage job crafting. Job crafting positively impacts job satisfaction, work engagement, and job performance.

Moreover, Harju, Hakanen, and Schaufeli (2016) investigated the relationship between job crafting and worked engagement by taking a sample of 20,471 employees in 2011 and 6,989 employees in 2014. This study has found that there is a significant positive relationship between increasing structural job resources and work engagement ($\beta = .09$, $p < .001$) and a significant positive relationship between increasing social job resources and work engagement ($\beta = .07$, $p < .01$).

Bakker et al. (2010); Demerouti and Bakker (2011); Schaufeli and Bakker (2004) have found an inverse relationship between work stress and work engagement. Furthermore, Bakker and Demerouti (2007) mentioned a negative relationship between work stress and work engagement.

Further, Moura, Orgambidez-Ramos and Goncalves (2014) studied the role of work stress and engagement by taking a sample of 312 Portuguese employees. Moreover, this study enables them to find that work stress and engagement have a negative relationship ($r = -.15$, $p < .05$). Hence, these studies can be used as a platform to confirm that there is a negative relationship between work stress and work engagement.

Moreover, Singh and Singh (2018) studied how employees proactively craft their jobs to avoid work stress and increase their performance. This study has taken a sample of 268 IT management professionals working in India's national capital region (NCR). According to their findings, job crafting significantly and negatively impacted work stress ($\beta = -.48, p < .001$). Hence, this study can be used to show the negative relationship between job crafting and work stress.

With the support of the empirical evidence and the theoretical explanations discussed under the literature review, the hypotheses below are advanced in the current study to be tested with the primary data.

H1: Job crafting has a significant positive impact on work engagement.

H2: There is a significant negative relationship between job crafting and work stress.

H3: There is a significant negative relationship between work stress and work engagement.

H4: Work stress significantly mediates the impact of job crafting on work engagement.

3. Conceptual Framework

Based on existing literature evidence, job crafting is identified as the independent variable influencing the dependent variable, work engagement, via the mediating effect of work stress. Figure 1, the study's conceptual framework, depicts these hypothesized relationships among the variables.

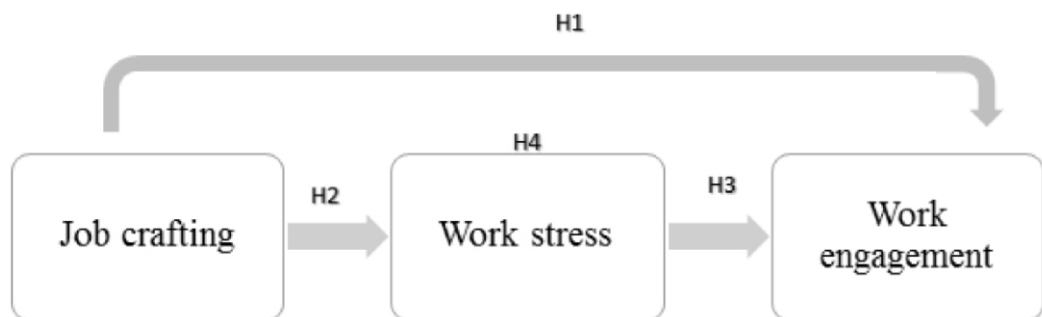


Figure 1: Conceptual Framework of the Study

Source: Author, 2021

4. Methodology

4.1 Population, sample, and the sampling technique

This study focused on a population of 2545 employees who are working at a leading private sector IT organization in Sri Lanka. Further, according to Kreicie and Morgan's (1970) table, this study focused on collecting data from a sample size of 335. Though the population is known, this study used simple random sampling as the sampling technique. However, due to the Covid 19 pandemic situation in the country, the researcher could collect only 132 questionnaires.

4.2 Measurements

Job crafting was assessed by adopting the measurement scale developed by Tims et al. (2012) through four dimensions; increasing structural job resources, decreasing hindering job demands, increasing social job resources, and increasing challenging job demands. The coefficient alpha for this scale: increasing structural job resources ($\alpha = 0.76$), decreasing hindering job demands ($\alpha = 0.75$), increasing social job resources ($\alpha = 0.73$), increasing challenging job demands ($\alpha = 0.77$), and they have also suggested that the scale can be used in similar studies in future. Respondents rates their level of agreement for the items on a seven-point Likert scale anchored at 1 = strongly disagree and 7 = strongly agree. Sample items included: 'I try to develop my capabilities' (increasing structural job resources); 'I make sure that my work is mentally less intense' (decreasing hindering job demands); 'I ask my supervisor to coach me' (increasing social job resources); 'When an interesting project comes along, I offer myself proactively as project co-worker' (increasing challenging job demands). Work stress was assessed using the adapted scales from Jamal and Baba (1992) and revalidated by Shukla and Srivastava (2016). Work stress was assessed through two dimensions; time stress and anxiety. The coefficient alpha for this scale was 0.83 in the study of Shukla and Srivastava (2016). A seven-point Likert scale was provided to the respondents to provide their level of agreement which was anchored at 1 = strongly disagree, and 7 = strongly agree. Sample items include: 'I have a lot of work and fear that very little time to do it (time stress); 'My job makes me nervous (anxiety).

Adopting the scales developed by Carmona-Halty et al. (2019), work engagement was assessed through three dimensions; vigor, dedication, and absorptions. The coefficient alpha for this scale was 0.9 in the study of Carmona-Halty et al. (2019). Nine items were used to measure this variable, anchored on a seven-point Likert scale

where one = strongly disagree and 7 = strongly agree. Sample items include: 'When I'm doing my work as an employee, I feel bursting with energy' (vigor); 'I am enthusiastic about my job' (dedication); 'I feel happy when I am doing my job intensely' (absorption).

4.3 Data Collection

The primary data was collected through an online questionnaire prepared and shared as a Google form among the respondents. This questionnaire is comprised of four sections; section one is used to collect responses that are related to the job crafting, section two is used to collect responses that are related to work stress, and section three is used to collect primary data which is related to work engagement items, and section four is used to collect details regarding the demographic factors such as age, gender, service period and educational level of the respondents.

5. Data Analysis and Results

The questionnaire was distributed among employees of the IT organization online as a Google form using social media and the e-mail service. The respondents were asked to fill out this questionnaire using their previous experience, not based on their perception. One hundred thirty-five respondents responded to the questionnaire. Out of that 135 responses, three responses were discarded completely where respondents had put the same rating for all the Likert scale items. Hence, the researcher has considered the rest of the 132 responses and entered them into SPSS for further analysis.

Further, frequency analysis has conducted by the researcher for all the Likert scale items in the questionnaire to ensure whether there were any missing values in the data set. The collected data were screened for univariate outliers using box plots. The researcher has generated the box plots for the mean values of each variable in all constructs with the help of SPSS. None of any univariate outliers and missing values are found in the data set.

5.1 Sample Composition

This section illustrates the profile of the sample used for this study based on demographic factors such as gender, age, service period, and educational level. A composite of the sample of the study is described in table 1.

Table 1: Sample Composition

| | | | |
|--------------------------|--------------------|-----|-------|
| Gender | Male | 77 | 58.3% |
| | Female | 55 | 41.7% |
| Age | Less than 24 years | 22 | 16.7% |
| | 24 – 30 years | 89 | 67.4% |
| | 30 – 36 years | 19 | 14.4% |
| | 36 – 42 years | 2 | 1.5% |
| Service Period | Less than 1 year | 36 | 27.3% |
| | 1 – 2 years | 66 | 50.0% |
| | 2 – 3 years | 19 | 14.4% |
| | 3 – 6 years | 5 | 3.8% |
| | More than 6 years | 6 | 4.5% |
| Educational level | Secondary level | 2 | 1.5% |
| | Degree level | 118 | 89.4% |
| | Postgraduate level | 9 | 6.8% |
| | Professional level | 3 | 2.3% |

Source: Analyzed Data, 2021

5.2 Reliability Statistics

Internal consistency statistics were used to ensure the reliability of the measurement scales. Moreover, Nunnally (1978) mentioned that the Cronbach's Alpha coefficient could assess construct and dimension reliability. Furthermore, table 2 helps to identify that the multi-item scale is reliable where all variables' Cronbach's Alpha values are greater than 0.7.

Table 2: Reliability Statistics

| Construct/s | Dimension | No. of items | Cronbach's Alpha |
|--|-------------------------------------|--------------|------------------|
| Job crafting [Cronbach's Alpha = 0.754] | Increasing structural job resources | 05 | 0.743 |
| | Decreasing hindering job demands | 05 | 0.748 |
| | Increasing social job resources | 05 | 0.744 |
| | Increasing challenging job demands | 05 | 0.749 |
| Work stress [Cronbach's Alpha = 0.756] | Time stress | 04 | 0.702 |
| | Anxiety | 05 | 0.745 |
| Work engagement [Cronbach's Alpha = 0.700] | Vigor | 03 | 0.785 |
| | Dedication | 03 | 0.785 |
| | Absorption | 03 | 0.799 |

Source: Analyzed Data, 2021

5.3 Validity Statistics

The researcher has used the Kaiser-Meyer-Olkin (KMO) Measure and Bartlett's test to ensure the sampling adequacy and the sphericity of this study sample. This test has statistically ensured that the study sample of 132 is adequate / to proceed with EFA where the KMO coefficient is greater than 0.7 for all variables and the Sig. value is less than 0.05. Moreover, the test indicates a sufficient correlation among the variables. Hence this test has ensured that KMO measures of sampling adequacy meet the minimum criteria. Results of the KMO and Bartlett's test are given in table 3.

Table 3: Results of the KMO and Bartlett's Test

| Dimension | Variable | Kaiser-Meyer-Olkin Measure of sampling adequacy | | Bartlett's test of sphericity | | | | | |
|-------------------------------------|------------------------|---|--------------|-------------------------------|----------------|----|------------|------|-------------|
| | | | | Approx. Square | Chi- | df | Sig. | | |
| Increasing structural job resources | Job crafting | 0.751 | 0.711 | 147.240 | 840.902 | 10 | 190 | .000 | .000 |
| Decreasing hindering job demands | | 0.727 | | 155.993 | | 10 | | .000 | |
| Increasing social job resources | | 0.757 | | 146.132 | | 10 | | .000 | |
| Increasing challenging job demands | | 0.703 | | 166.735 | | 10 | | .000 | |
| Time stress | Work stress | 0.742 | 0.791 | 88.085 | 259.627 | 6 | 36 | .000 | .000 |
| Anxiety | | 0.801 | | 133.753 | | 10 | | .000 | |
| Vigor | Work engagement | 0.702 | 0.710 | 110.528 | 388.825 | 3 | 36 | .000 | .000 |
| Dedication | | 0.705 | | 111.064 | | 3 | | .000 | |
| Absorption | | 0.703 | | 122.594 | | 3 | | .000 | |

Source: Analyzed Data, 2021

In line with the validity statistics of the study, the cumulative percentage of the Extraction Sums of Squared Loading (ESSL Cum %) of three constructs are greater than 50%, and the Factor Loading (FL) values of items are above the threshold limit of 0.5 which is recommended by Hair, Black, Babin & Anderson (2010). The researcher has removed the item coded as JHI2 (FL value = 0.691) to ensure the construct validity of the decreasing hindering job demands dimension.

5.4 Descriptive Statistics

Mean and the standard deviation are the two basic measures of descriptive statistics that are widely used in social science research. In social science, the variability of the construct is said to be accepted if the skewness value falls between -2 and +2 (Hair et al., 2010). Statistically, skewness measures the relative size of the distribution's two tails, whereas kurtosis measures the combined size of two tails. This study's kurtosis

values fall between -3 and +3, ensuring that the data is normally distributed (Hair et al., 2010). Details regarding the mean, standard deviation, skewness, and kurtosis of the constructs of this current study are demonstrated in table 4.

Table 4: Descriptive Statistics

| Construct | N | Mean | SD | Skewness | Kurtosis |
|-----------------|-----|--------|---------|----------|----------|
| Job crafting | 132 | 5.7769 | 0.29463 | -0.107 | 0.262 |
| Work stress | 132 | 1.9386 | 0.36306 | 0.320 | -0.253 |
| Work engagement | 132 | 5.8359 | 0.36876 | -0.275 | -0.177 |

Source: Analyzed Data, 2021

5.5. Testing for Multivariate Assumptions

The researcher has constructed a scatter plot with SPSS to test whether there is a linear association between the dependent and independent variables. An automatic line is drawn in the scatter plot at a 95% confidence interval to ensure the underlying linear relationship between the dependent and independent variables. Moreover, the data analysis results show the linear relationship between work engagement and job crafting, the linear relationship between work stress and job crafting, and the linear relationship between work engagement and stress.

5.6 Correlation Analysis

Based on the linear relationship found among the variables of this study, Pearson Correlation Coefficient was used to measure the strength of the association among the said variables. Table 5 explains the relationship between job crafting and work stress (H2), and table 6 demonstrates the relationship between work stress and work engagement (H3). Though the advanced hypotheses are directional, Sig. (1-tailed) test was applied to test the significance of the correlation coefficient.

Table 5: Correlation Analysis

| | | Work stress | Job crafting |
|------------------------|---------------------|-----------------|--------------|
| Work stress | Pearson Correlation | 1 | -0.150* |
| | Sig. (1-tailed) | | 0.043 |
| | N | 132 | 132 |
| Job crafting | Pearson Correlation | -0.150* | 1 |
| | Sig. (1-tailed) | 0.043 | |
| | N | 132 | 132 |
| | | Work engagement | Work stress |
| Work engagement | Pearson Correlation | 1 | -0.253** |
| | Sig. (1-tailed) | | 0.002 |
| | N | 132 | 132 |
| Work stress | Pearson Correlation | -0.253** | 1 |
| | Sig. (1-tailed) | 0.002 | |
| | N | 132 | 132 |

** Correlation is significant at the 0.05 level (1-tailed)

Source: Analyzed Data, 2021

According to table 5, there is a weak negative correlation between job crafting and work stress ($r = -0.150$) which is statistically found to be significant as Sig. 1-tailed (0.043) is less than the significance level (0.05). Hence, H2 is accepted, testifying that job crafting and work stress are significantly negatively correlated.

Based on the facts which are demonstrated in table 6, it is found that there is a weak negative correlation between work stress and work engagement ($r = -0.253$). Moreover, this found relationship is statistically significant as Sig. 1-tailed (0.002) is less than the significance level (0.01). Hence, H3 is accepted, testifying that work stress and work engagement are significantly negatively correlated.

5.7 Regression Analysis

The researcher has done the linear regression analysis to test the hypothesis (H1) advanced for the impact of job crafting on work engagement. Results of the test are given in Tables 7 and 8.

Table 7: Regression Statistics

| | |
|-------------------|--------------------|
| Multiple R | 0.503 ^a |
| R Square | 0.253 (25.3%) |
| Adjusted R Square | 0.248 |
| Standard Error | 0.31984 |
| Observation (N) | 132 |
| F | 44.143 |
| Sig. | .000 ^b |
| Regression | Linear |
| Method | Enter |

Source: Analyzed Data, 2021

According to table 7, 25.3% (R Square = 0.253) of the variation of work engagement could be significantly (Sig. = 0.000, which is less than 0.05) explained by the independent construct in the research model; job crafting. Moreover, as per the details in table 8, the marginal contribution of job crafting (0.630) in determining the effect on work engagement is considered statistically significant (Sig. = 0.000) in the regression equation.

Table 8: Coefficients

| Model | | Unstandardized Coefficient | | Standardized Coefficient | t | Sig. |
|-------|--------------|----------------------------|------------|--------------------------|-------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.196 | 0.549 | - | 4.002 | 0.000 |
| | Job crafting | 0.630 | 0.095 | 0.503 | 6.644 | 0.000 |

Source: Analyzed Data, 2021

Hence, according to the regression results, H1 is accepted and statistically proven that job crafting has a significant positive impact on work engagement.

5.8 Residual Analysis for Model Fitness

Residual analysis for model fitness was conducted to ensure that the set regression model is fitted enough to predict the future scenarios of a similar effect. Based on the results of the study, the residuals are distributed around the forty-five-degree diagonal line of the plot, and also, there is no pattern of distribution of those residuals as they are scattered. Moreover, residuals dots are closer to the diagonal line, confirming that the residuals are approximately normally distributed. Hence, it is ensured that the regression model's adequate fitness in predicting the effect of the same in future scenarios.

5.9 Mediator Analysis

The researcher has done the Sobel test to check the advanced hypothesis H4 to ensure whether the work stress significantly mediates the impact of job crafting on work engagement. The direct effect of job crafting on work engagement is found by the unstandardized Coefficient of B value which is equal to 0.630 (Standard Error = 0.095), where it is statistically proven that the direct effect of job crafting on work engagement is significant (Sig. = 0.000 which need to be less than 0.05). The indirect effect of job crafting and stress on work engagement is depicted in table 9.

Table 9: Indirect Effect

| Model | | Unstandardized Coefficient | | Standardized Coefficient | t | Sig. |
|-------|--------------|----------------------------|------------|--------------------------|--------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.751 | 0.586 | - | 4.697 | 0.000 |
| | Job crafting | 0.596 | 0.094 | 0.476 | 6.327 | 0.000 |
| | Work stress | -0.185 | 0.076 | -0.182 | -2.416 | 0.017 |

Source: Analyzed Data, 2021

The indirect effect of job crafting on work engagement which is mediated by the work stress, is -0.11026 (0.596*-0.185). Further, the Sobel test p-value is used to ensure the significance of this indirect effect. According to figure 2, the current study's indirect effect, the mediation effect of work stress, is statistically proven as significant (0.023), where it needs to be less than 0.05. Moreover, work stress is found to be a partial mediator; therefore, H4 is accepted, testifying that work stress significantly mediates the impact of job crafting on work engagement.

| Input: | | Test statistic: | Std. Error: | p-value: |
|----------------|--------|---------------------------|-------------|------------|
| a | 0.596 | Sobel test: -2.27248943 | 0.04851948 | 0.02305697 |
| b | -0.185 | Aroian test: -2.24824956 | 0.0490426 | 0.02456028 |
| s _a | 0.094 | Goodman test: -2.29753063 | 0.04799066 | 0.02158852 |
| s _b | 0.076 | Reset all | Calculate | |

Figure 2: Sobel Test

Source: Survey Data (2021)

6. Discussion of Findings

The current study creates the platform to identify several effects of the current study's construct, which align with the previous research findings. The following studies have supported the positive impact of job crafting on work engagement (H1). According to Harju et al. (2016) study, it is found that there is a significant positive impact of job crafting on work engagement where they have found the positive impact of increasing structural job resources and work engagement ($\beta = .09$, $p < .001$), and between the increasing social job resources and work engagement ($\beta = .07$, $p < .01$). That study was conducted by taking a sample of 20,471 employees in 2011 and 6,989 employees in 2014. Compared with the current study, it found the same positive impact where the R square value for the impact of job crafting on work engagement is equal to 25.3%, and the unstandardized Coefficient of B value is 0.630 (Sig. .000), which is somewhat higher than the unstandardized Coefficient of B value of Harju et al. (2016). Moreover, the found positive impact of job crafting on work engagement has in line with the previous studies of Bakker et al. (2012); Petrou et al. (2012); Tims et al. (2013) where who have found that job crafting has a positive impact on job satisfaction, work engagement, and job performance.

Meanwhile, the relationship between job crafting and work stress (H2) can also confirm the existing empirical evidence. Singh and Singh (2018), they have found that there is a negative relationship between job crafting and work stress ($\beta = -.48$, $p < .001$)

which was conducted by taking a sample of 268 IT management professionals who are working in the national capital region (NCR) of India. The current study also found a negative relationship between job crafting and work stress, where the Pearson correlation value equals -0.150 (Sig. 0.043). Further, this found a negative relationship between job crafting and work stress, also confirmed the previous findings of Sulsky and Smith (2005), who found the same relationship between said variables.

Further, the negative relationship between work stress and work engagement (H3) is also in line with the previous research findings. The study by Moura et al. (2014) has found that there is a negative relationship between work stress and work engagement ($r = -.15$, $p < .05$), which was conducted by taking a sample of 312 Portuguese employees. The current study has also found a negative relationship between work stress and engagement, where the Pearson correlation value equals -0.253 (Sig. 0.002). Irrespective of the context and the sample size, the relationship between work stress and work engagement seems to be approximately the same. Moreover, the previous studies of Bakker et al. (2010), Demerouti and Bakker (2011), and Schaufeli and Bakker (2004) also found a negative relationship which is also in line with the current study's finding. In addition, this study found the mediation effect of work stress in between the impact of job crafting on work engagement (H4).

7. Recommendations

Based on the conclusion of this study, the researcher has been able to provide some recommendations to uplift the strength of the current study. The employees or the future employees of the leading private IT organization considered in the study should ensure to add more valuable and meaningful tasks for their daily responsibilities that will align with their interests and strengths, and for that, they have to interact with their respective supervisors, peers, subordinates, or even with the other department employees.

For that, the managers of this organization should take responsibility for creating a supportive environment within the organization. Moreover, these managers should empower their employees by delegating authority, providing resources, or providing opportunities to motivate them to implement this job crafting concept successfully. For example, managers can provide valuable employee feedback to help them craft their responsibilities successfully.

Moreover, academics and future researchers must be responsible for further studies to identify the potential new development areas within the job crafting concept. Further, they have to identify the effective solutions for the upcoming problems that can occur when implementing job crafting within an organization. Such solutions may help the organizations to implement them successfully. In addition, the government of Sri Lanka needs to encourage the public sector organizations to implement such a beneficial concept. With the help of the job crafting concept, the public sector may be able to increase their employee's engagement which ultimately helps to increase the national income of Sri Lanka.

8. Limitations of the Study

The researcher has encountered certain limitations when conducting the current study. The researcher has felt difficult to observe the employees' right behavior due to the practice of the cross-sectional field study. Moreover, the researcher was responsible for completing the study within nearly six months, which indirectly affected the further analysis opportunities of the researcher. In addition, the prevailing Covid-19 pandemic situation limits the study's sample size to 132 observations, leading the researcher to face some generalization issues regarding the study's results. Further, the researcher has used approximations to identify the normality and linearity of the study, and the found relationships are based on assumptions where the other factors remain constant.

9. Directions for Future Research

Future researchers who intend to research job crafting can go for a huge sample size of cross-organization and cross-industries to generalize their studies more accurately. Moreover, future researchers can use the longitudinal study to identify the employees' right behavior and eliminate the difficulties faced by the cross-sectional field study. Further, future researchers have the potential to support the business world by identifying new relationships which can occur between the factors that may affect job crafting.

10. Conclusion

Considering the findings of the current studies, it can be concluded that employees of the leading private IT organization selected for this study have the freedom to craft their tasks, duties, and responsibilities that the organization gives. Moreover, the current study enables us to ensure that the leading private IT organization in Sri Lanka enjoys various advantages generated by implementing the

job crafting concept within the organization. Reduction in employee work stress and the growth in employee engagement can be considered major job crafting advantages the organization currently enjoys. Further, it can be said that this organization can increase its employee engagement by implementing the job crafting concept more among its employees. The main problem in the IT industry, which is the work stress that is proven by previous studies, is having a low level among the employees of the leading private IT organization in Sri Lanka because of the job crafting concept. The main problem may hugely and negatively affect employee work engagement if the organization fails to implement this job crafting concept successfully. Finally, this study can be concluded that the leading private IT organization representing the IT industry in Sri Lanka is implementing the job crafting concept, which helps the organization to reduce the work stress up to a certain level and increase employee engagement.

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