Testing the Reciprocal Relationship between Work Engagement and Job Crafting Behavior with the Mediating Role of Psychological Capital

Sadia Ishaque, Assistant Professor, Department of Business Administration, Air University, Pakistan
Khawaja Khalid Mahmood, Associate Professor, Institute of Management Sciences, Bahauddin Zakariya University, Multan, Pakistan
Rabia Luqman, Assistant Professor, Department of Management Sciences, Comsats University Islamabad, Pakistan
*Maria Shams Khakwani, Assistant Professor, Institute of Management Sciences, The Women University Multan, Pakistan

*Corresponding author’s email: maria.shams@wum.edu.pk

ARTICLE DETAILS

History
Revised format: Aug 2023
Available Online: Sep 2023

Keywords
Job Crafting,
Work Engagement,
Psychological Capital,
Higher Education Institutes.

JEL Classification
M1, M2

ABSTRACT

Purpose: The prevalence of crafting tasks in the workplace is rising in today's enterprises. Little is known about the underlying mechanisms of job crafting as of now. In this study, we examine how psychological capital plays a mediating role in the reciprocal relationship between job crafting and work engagement.

Design/Methodology/Approach: The necessary information for the analysis was gathered from Pakistani higher education institution faculty members, with a sample size of 240 faculty members. To test these hypotheses, we employed SmartPLS.

Findings: The study's conclusions show that psychological capital plays a role in mediating the reciprocal relationship between work engagement and job crafting. According to this study a person who is confident, hopeful, resilient, and self-efficient asks for more job resources and challenges at work.

Implications/Originality/Value: By examining the reciprocal association between work engagement and job crafting behavior among Pakistani academic members, the study genuinely contributes in policy designing for employees who are more engaged at work and having high psychological capital are more motivated to craft their jobs at work.

© 2023, The authors, under a Creative Commons Attribution-NonCommercial 4.0


Introduction

In present dynamic business environment, employee initiative is essential to an organization's
survival and success. Currently, job crafting is one such proactive work action that is garnering more academic attention. An employee who tailors his work duties to suit his preferences is engaging in job crafting (JC), which could be defined as aggressive conduct. According to Wrzesniewski and Dutton (2001), and Tims and Bakker (2010), it is corroborated by a previous study that asserts employees face a number of obstacles that keep them from taking proactive measures. According to Baker et al. (2013), there are situations in which employees are unable to exhibit proactive behavior at work due to a lack of managerial support or sufficient resources. As a result, they don't feel motivated in their jobs.

It's common knowledge that a contented team produces more effectively. Considering the welfare of their workforce is now required of modern organizations, not just a trendy thing to do. Employers are focused on maintaining employee satisfaction and motivation so that they can effectively support the achievement of the organization's objectives. According to Hakanen, Peeters, and Schaufeli (2017), work engagement is crucial to allowing employees to function well and happily in companies at this fast-paced time. Work engagement (WE) is the degree of dedication, zeal, and focus that one demonstrates while at work. According to Bakker, Schaufeli, Leiter, and Taris (2008), workers who feel invested in their work are more inclined to try out novel strategies to keep it interesting and difficult.

Higher education institutions' ability to survive is greatly influenced by their faculty. This study has been conducted on faculty members in higher education institutions in Pakistan. Academic degrees can be awarded by higher education establishments, which also provide postsecondary education. Academic-related jobs are performed by faculty members in higher education institutions. Faculty members may also undertake research or handle some administrative duties in addition to their teaching duties. Research students under the supervision of faculty personnel who are also required to publish their findings in credible publications. Owing to these varied work responsibilities, they have to plan their work for better performance and wellbeing (Khan, Khan, & Imran, 2018).

According to a study report, there is a claim that engaged workers have a good correlation with job crafting (Astor, 2007). According to earlier studies on this connection, proactive personalities and self-management strategies can function as moderators (Gupta & Singh, 2014). Psychological capital (PC) is hypothesized and investigated in this study as a mediating variable in the association among WE and JCB because it has been demonstrated that being proactive increases job crafting. A positive state is referred to as one's psychological capital. The ability to take on and finish a difficult task or challenge, optimism about current and future accomplishments, hope for reaching objectives and expectations, and resilience even in the face of setbacks are traits such as self-efficacy (Luthans, Youssef, & Avolio, 2007). An employee with a high PC is very driven to complete their tasks at work. According to Fredrickson's (2004) broaden-and-build hypothesis, positive emotions heighten an individual's consciousness and confidence, resulting in heightened energy, creativity, and dynamic performance at work. As a result, a more self-assured individual gives his employer his all and tries to take on new and difficult tasks at work. Due to its examination of the connection between crafting behavior and work engagement, this study is unique in its field. Unlike in earlier study, where it was believed to be the result of JCB, WE are described as a precursor of JCB.

Psychological capital is also being studied as a potential mediating variable among WE and JCB. Since most studies deal with job engagement as an outcome, it appears that no research looks at this relationship where work engagement is treated as an antecedent. Our knowledge of how engaged workers increase the difficulty of their work by engaging in crafting behavior will grow as a result of this study. In addition, the mediating role of psychological capital would aid in our comprehension of the relationship between job crafting and work engagement. As such, it is the
first study to examine the reciprocal relationship between job crafting and work engagement using psychological capital as a mediating factor.

According to the majority of previous studies, employees who have high psychological capital are more engaged and show more job-crafting behavior at work (Jessica et al., 2019; Karatepe & Karadas, 2015; Hussein et al., 2020). A study by Kerksieck et al (2019). found an adverse correlation between works' psychological capital and job-crafting behavior. People who are resilient, self-sufficient, and upbeat desire more challenges and responsibilities at work, according to the study. Thus, by demonstrating that highly engaged people have high psychological capital and are more motivated to customize their work, our study has made a substantial contribution.

**Literature Review and Hypothesis Development**

**Work Engagement**

The term "work engagement" refers to an employee's commitment, energy, and focus while at work. People with high levels of work engagement are enthusiastic and full of energy; they work hard at their jobs because they enjoy what they do (Bakker et al., 2008). The propensity for an employee to work hard is another factor in work engagement. On the other hand, vigour refers to an employee's level of energy, mental toughness, and disposition in trying circumstances. Employee dedication is measured by how engaged they are with their work, how proud they are of themselves, and how hard their work is. The degree to which a worker becomes engrossed in his work and finds it difficult to be detached from it is known as absorption. The notion of work engagement has been evolving for a number of years. However, a variety of ideas and propositions have stifled the development of the proper and appropriate form of vision or cognition to hone the concept. So, taking into account different perspectives on work engagement is a good method to comprehend the idea and draw a reliable conclusion from it. When Kahn (1990) first used the word "work engagement," he was referring to the way in which people within an organization apply and convey their intellect, body, and sincerity in carrying out their designated job tasks. Ultimately, workers view their work as the opposite of burnout since they bring their own self to it (Maslach & Leiter, 1997). Viewing things as tough at work can assist combat the burnout experience (Schaufeli, Bakker, Bakker, & Leiter, 2010). Work involvement is defined as having a positive outlook, contributing fully to the task at hand, and assimilating the work. Engaged workers feel more motivated to work towards testing goals and strive for greater success. Employee vitality is reflected in their job engagement; they feel energized and enthusiastic about applying their vitality to their work (Bakker, Albrecht, & Leiter, 2011).

**Job Crafting Behavior**

One way to characterize work crafting behavior is as a proactive action when an employee modifies his job duties in accordance with his personal preferences (Tims et al., 2010). It could also be defined as a behavior type in which workers actively modify aspects of their jobs, such as behaviors aimed at making the job more demanding and less burdensome, as well as raising the social and structural demands (Tims & Arnold, 2010). This study adopts the job crafting paradigm of Tims and Bakker (2010), after which Tims and Baker (2012) proposed three categories of employee behaviors related to work crafting. One is the conduct of workers who make demands for additional employment resources, either social or structural. Employees want greater demands or challenges from their employment in the second behavior, and they attempt to minimize the pressures that are impeding their jobs in the third behavior. When workers ask for greater autonomy or make an effort to learn something new, it makes sense that their behavior would be to demand additional structural resources. The need for additional social resources can be explained by employees asking for feedback from their managers to find out if they are happy with the work being done or not. The assistance of peers
and coworkers is another one of these social tools. Increasing job demands and challenges can be described as a result of employees taking on more responsibility on a voluntary basis and attempting to increase the level of challenge in their jobs by adding more chores. Expanding job crafting is another name for these three forms of job crafting (Tims & Bakker, 2010). Reducing obstructive expectations is the fourth type of work designing behavior, according to Tims and Bakker (2010). This behavior makes sense when workers try to avoid all of the mental and emotional strains that come with their jobs. Avoiding emotionally demanding consumers is one example. According to Lepine, Podsakoff, and Lepine (2005), the primary distinction between these demand-related job creating strategies is that employees respond positively to challenging demands while they are negatively impacted by decreasing impeding demands.

**Psychological Capital**

The origin of psychological capital has originated from positive psychology. Psychological capital (PC) is seen as a derivative of positive organizational behavior (POB) that is borrowed from the positive psychology theory (Avey, 2009; Luthans, 2002; Luthans, 2005; Luthans, 2006; Luthans, 2007). Positive psychology is all about the strengths rather than the weakness; it is about how to develop rather than how to retain. Based on prior research conducted by Luthans (2002, 2005, 2006, 2007) and Avey (2009), it has been shown that the constructs most effectively meeting the requirements for POB are hope, resilience, optimism, and self-efficacy.

In theory, these psychological resources come from a variety of different backgrounds and have different definitions. According to Stajkovic and Luthans (1998), one definition of effectiveness is "the confidence or belief that an individual possesses regarding his capabilities to use and deploy cognitive resources, engage motivation, and apply courses of action that are required to effectively complete a job or perform activities in the current setting." Hope can be defined as the state of mind of an employee in which he experiences a greater sense of positive motivation. An explanation for optimism is that it is an optimistic expectation of the amazing things that are going to happen in the future. According to Carver and Scheier (2002) and Seligman (1998), optimism is defined as the belief that one's abilities are unquestionable and that one should never consider it "your fault" when confronted with a difficult situation. The capacity of an employee to cope with adverse circumstances, conflicts, and failure is one definition of the trait known as resilience. Luthans et al. (2007) have referred to these four concepts as psychological capital. They have been demonstrated both theoretically and practically, and they have been given the name psychological capital.

**Employee Engagement and Job Crafting Behavior**

According to the regulatory emphasis theory (Higgins, 1997), workers who are highly committed to their jobs are more focused on advancement. They pursue their objectives while highlighting their aspirations and successes. Previous studies have demonstrated that motivated workers are more concerned with the demands and resources of their jobs. Additionally, when workers are more involved in their work, they add new and creative activities and make their employment harder in order to prevent monotony and boredom (Tims & Arnold, 2010).

Regarding inspiration, Bandura's (1978) theory of self-efficacy offers some significant recommendations. According to the idea, employees will consciously engage in exercises to the extent that they believe they possess skill. Employees will strive to be productive at tasks where they feel competent and more accountable for their job. Workers occasionally possess the skills needed to perform the profession. Almost everyone is able to differentiate between the tasks they needed to complete, the goals they needed to reach, and the things they might want to change. In any event, a sizable portion of the workforce will complete the duty without reluctance, despite the fact that it is not an easy or basic one. A worker will be better equipped to handle the more difficult tasks involved in his position when he is invested in his work and has confidence in

Additionally, motivated workers would want additional organizational and social resources; for instance, they would try to take on new tasks or projects and request evaluations and comments from their supervisors. (Schaufeli & Arnold, 2004). Furthermore, previous studies show that engaged employees are not inclined towards decreasing hindering demand that is avoiding the emotional interaction with the customer as well as not involved in a cognitive task, whereas according to different studies engaged employees are those who like the cognitive task, try to solve customer problems in a friendly way and like the emotional interactions associated with a job (Tims & Arnold, 2010; Demerouti, 2015; Derks & Daantje, 2015; Tims et al., 2016). Thus, a hypothesis that may be made based on this is:

H1: Engaged employees have a positive relationship with job crafting behavior.

**Work Engagement, Psychological Capital and Job Crafting Behavior**

A mediator variable facilitates the reconciliation of two or more variables within a research study (Liang & Fassinger, 2008; Amery D Wu & Zumbo, 2008). The present study examines the role of psychological well-being as a mediator. According to Deci and Ryan (2000), the Self-Determination Theory (SDT) posits that the requirements and provisions inherent in a work have the potential to satisfy an individual's fundamental psychological needs for autonomy, relatedness, and competence. The concept of autonomy can be elucidated as an individual's desire for psychological independence when one experiences a sense of freedom rather than perceiving oneself as being subject to control or external pressures. The desire for relatedness is associated with the want for an intimate connection. The concept of competence can be defined as an individual's desire to acquire the necessary skills and abilities to effectively navigate their environment, exhibit positive behaviors, and effectively cope with various problems (Broeck, Vansteenkiste, De Witte, & Lens, 2008). Moreover, the Self-Determination Theory (SDT) posits that the fulfilment of these demands would also amplify employees' favorable conduct (Deci & Ryan, 2000). The concept of psychological capital, which is rooted in positive psychology, centers around the strengths of individuals. It has been shown that employees who are actively engaged tend to exhibit more positive behavior (Luthans et al., 2005).

The concept of higher psychological capital pertains to the resources possessed by employees, and it has been observed that engaged employees tend to possess a greater number of personal resources (Vogt, 2016). According to Kohn's (1982) research, there exists a reciprocal relationship between the personal resources of employees and the working conditions inside an organization. Employees who possess personal resources are more likely to create a conducive working environment for themselves. According to Vogt (2016), employees engage in a higher degree of job crafting within their own workplaces. In essence, an engaged employee exhibits higher levels of self-efficacy, resilience, optimism, and job crafting behavior within their organization (Vogt, 2016). It is possible to hypothesize that:

H2: WE lead to building PCB
H3: Greater PCB leads to JCB
H4: Engaged employees do more Job Crafting with the mediating role of Psychological Capital

**Research Methodology**

**Population, Sampling, and Respondents**

This study recruited faculty members employed in institutes of higher education. The sampling methodology employed in this study was cross-sectional in nature, wherein data was gathered at a single moment in time. The study employed survey methods, wherein questionnaires were distributed to various Higher Education Institutions (HEIs) in Pakistan. The sample techniques
employed in this study included stratified random sampling and basic random sampling. Initially, the universities in the province of Punjab were categorized into two distinct strata: public and private universities. Stratified random sampling involves the division of a population into smaller subgroups, referred to as strata (Etikan et al., 2017). The compilation of universities was obtained from the official website of the Higher Education Commission (HEC) in Pakistan. This comprehensive list encompasses both public and private universities located in the province of Punjab, as categorized by the Punjab government, covering all academic subjects. The list comprised a collective count of 36 state universities and 26 private universities. Subsequently, an additional application of simple random sampling was employed to further refine the selection of universities.

Simple random sampling is a fundamental sampling strategy in which every individual within a population has an equal probability of being selected (Etikan et al., 2017). A total of around 1000 questionnaires were distributed, yielding a response rate of 26.5%. Out of the 265 questions returned, 240 were deemed suitable for analysis, while the remaining questionnaires were excluded due to insufficient or incomplete responses provided by the participants. Each participant was provided with explicit instructions in order to minimize the potential influence of social desirability (Podsakoff & Organ, 1986).

Moreover, in order to address the issue of common technique bias, researchers have implemented the approach proposed by Podsakoff et al. (2003). In the initial stage, in order to mitigate the potential bias caused by respondents' awareness of the research topic, all labels pertaining to variables and their respective dimensions were deliberately excluded. During the subsequent phase, it was explicitly emphasized that maintaining the confidentiality of the participants was our foremost concern. Subsequently, the surveys were distributed to each participant individually, enclosed within distinct envelopes, with the assurance that they were granted the freedom to respond to all inquiries.

This research involved three main variables: work engagement, psychological capital, and job crafting. "Work engagement" was assessed by using the Utrecht Work Engagement Scale (Schaufeli, Bakker, & Salanova, 2006). It has three dimensions; one is vigor which consists of three items. Second is dedication and it consists of three items. The third one is absorption and it also consists of three items. All the responses were assessed on a scale ranging from 0 = never to 6 = always.

Job crafting was assessed by employing the Job Crafting Scale (Tims et al., 2012) having four dimensions: increasing structural resources, increasing social resources, increasing challenging demands, and decreasing hindering demands. The response options were on a scale ranging from 1 (never) to 5 (very often). Psychological capital was measured by using the 12 item scale by Luthans et al. (2007) consisting of hope (four items), optimism (two items), resilience (three items), and self-efficacy (three items) and measured using six-point Likert scale ranging from 1 (I strongly disagree) to 6 (I strongly agree).

Analysis
The data was analyzed using SmartPLS SEM-path modeling which is a well-known multivariate and a non-parametric method for hypothesis testing (Hair, Sarstedt, Ringle & Gudergan, 2017). There are several motives behind its selection. First, this method helps the researcher in relationship estimation of measurement model and structural model at the same time. Second, prominent scholars for example, Hair et al. (2017) recommended that SmartPLS is useful for difficult frameworks, predominantly it is used when a mediator is involved in the study. Thirdly, as compared to the AMOS software, SmartPLS is very user-friendly. Fourth, this method has been broadly utilized in previous studies and has a strong component base. (Blanco-Gonzalez et
al., 2020; De Mendonca et al., 2019; Guo et al., 2019). Smart PLS involves a two-step technique of analysis, a measurement model to assess the reliability and the validity is the first step (Hair et al, 2016), and then in the next step which is known as structural model, the hypothesis testing is performed.

Analysis of Measurement Model
In the first stage, the measurement model was run and examined. The results of this measurement model analysis are shown in Table 1. Here it is been observed that the threshold value (0.70) for outer loading of the items is achieved, and the items which were below the threshold values were deleted (Garson, 2016; Henseler, Ringle, & Sarstedt, 2012). Composite reliability (CR) was also achieved because all the values were more than the threshold value which of 0.70 (Henseler et al., 2012). The values of average variance extracted (AVE) also explained that the convergent validity (CV) was attained as the values were more than the threshold limit of 0.50 (Höck & Ringle, 2006). Next, HTMT criteria was used to measure the (DV) discriminant validity of the constructs which was also achieved because all the values were less than threshold limit of 0.85 (Kline, 2011) as shown in Table 2. Overall model fit was attained as well as indicated through SRMR of 0.07 (Hu & Bentler, 1998).

<table>
<thead>
<tr>
<th>Table 1: Reliability and Validity of Measurement Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>WE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Job</td>
</tr>
<tr>
<td>Crafting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table 2: Discriminant Validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Dimensions</th>
<th>Items</th>
<th>Loadings</th>
<th>CR</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreasing</td>
<td>hindering demand</td>
<td>DHJD11</td>
<td>0.841</td>
<td>0.898</td>
<td>0.598</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHJD12</td>
<td>0.892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHJD13</td>
<td>0.716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHJD14</td>
<td>0.728</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHJD15</td>
<td>0.767</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHJD16</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing</td>
<td>challenging demand</td>
<td>ICJD17</td>
<td>0.849</td>
<td>0.879</td>
<td>0.593</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICJD18</td>
<td>0.799</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICJD19</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICJD20</td>
<td>0.748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICD21</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.785</td>
<td>0.584</td>
</tr>
<tr>
<td>HOPE</td>
<td></td>
<td>PC1</td>
<td>0.798</td>
<td>0.842</td>
<td>0.727</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC4</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td></td>
<td>PC6</td>
<td>0.782</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td>PC8</td>
<td>0.895</td>
<td>0.724</td>
<td>0.568</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC9</td>
<td>0.982</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td>PC10</td>
<td>0.822</td>
<td>0.913</td>
<td>0.778</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC11</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC12</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Work Engagement</th>
<th>Psychological Capital</th>
<th>Job Crafting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evaluation of Structural Model

The afterward stage is structural model assessment in PLS-SEM. The current study used the technique of bootstrapping for resampling and replicates the 240 cases 5000 times to evaluate the significance of path coefficients (Henseler et al., 2009; Hair et al., 2016). The model's accuracy is defined by $R^2$ which specifies the variance percentage of dependent variables as described by its antecedents. Here, work engagement which is dealt as the independent variables explained the variance of 25.9% in the job crafting behavior. Whereas the dependents variable's degree of change for each independent variable was pointed out by the path coefficients (Hair et al., 2016; Pallant, 2010). In Table 3, the findings show that work engagement impacts on job crafting behavior is significant; this shows that our first hypothesis is accepted. Further hypothesis two and three are also accepted as work engagement has significant impact on psychological capital, and psychological capital has significant impact on job crafting.

<table>
<thead>
<tr>
<th>Work Engagement</th>
<th>Psychological Capital</th>
<th>Job Crafting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Capital</td>
<td>0.247</td>
<td>0.289</td>
</tr>
<tr>
<td>Job Crafting</td>
<td>0.321</td>
<td>0.487</td>
</tr>
</tbody>
</table>

Table 3: Bootstrapping Results and Hypotheses Testing

<table>
<thead>
<tr>
<th>Path coefficients</th>
<th>$T$ statistics</th>
<th>$p$ values</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE-JC</td>
<td>0.232</td>
<td>4.597</td>
</tr>
<tr>
<td>WE-PC</td>
<td>0.326</td>
<td>4.676</td>
</tr>
<tr>
<td>PC-JC</td>
<td>0.433</td>
<td>5.679</td>
</tr>
</tbody>
</table>

Mediation Analysis

The bootstrapping in SmartPLS suggested by Hair et al (2017) is further used to check the mediator's impact. Here in this study, PC is dealt as mediator in the relationship between WE & JC. Bootstrapping does not mark the postulation about the shape of variables distribution or statistical sampling distribution. Furthermore, the usefulness of bootstrapping is well recognized even when there is a small sample size. Table 4 indicates that there is significant indirect impact of WE on JC by taking PC as mediator (hypothesis four is accepted). According to Hair et al. (2017), when there is significant direct and the indirect effects and also both the hypothesis direction is same, then it is known as the complementary mediation. So here in this study the WE and JC has a complementary mediating effect.

Table 4: Mediation Analysis

<table>
<thead>
<tr>
<th>Direct effect</th>
<th>95% confidence interval of the direct effect</th>
<th>$T$ value of the direct effect</th>
<th>Significance</th>
<th>Indirect effect</th>
<th>95% confidence interval of the indirect effect</th>
<th>$T$ value of the indirect effect</th>
<th>Significance</th>
<th>Type of mediation</th>
</tr>
</thead>
</table>
Discussion
The key purpose of the research was to explore that how work engagement and the job crafting behavior of employees is mediated through psychological capital. Theoretically, the hypothesis is based on the JDR (job-demand resource) model. A total of 240 sample sizes of faculty members in a higher education institution was taken for hypothesis testing. The research outcomes explain that higher work engagement positively impacts job crafting behavior and is mediated through psychological capital. Hence, we have tested a reciprocal relationship and considered work engagement as the antecedent of job crafting behavior. By doing that, this study helps to understand that how highly motivated employees with high psychological capital can contribute to organizational success by investing their energies in job crafting.

According to our expectations, we revealed that highly engaged employees were more involved in job crafting behavior. Furthermore, it has been observed that the employee's high psychological capital acts as a mediating variable in the association between WE and JC. In the previous research on the relationship between WE and JC, the WE are tested and established as the result of the job crafting behavior (Petrou et al., 2012, Tims, Bakker, & Derks, 2013, Tims, Bakker, Derks, & Van Rhenen, 2013). The current outcomes of the study contribute in this manner that WE can also be an antecedent of JC. So based on the evidence the relationship between WE and JC is proved as a plausible link. (Hakanen et al., 2017; Lu et al., 2014; Tims et al., 2016).

Seemingly, employees become more engaged when organization increases their resources and challenges at work, but on the other hand, highly engaged employees also stimulate the job resources and challenges at work. Likewise, current studies of Hakanen et al. (2017) and Zeijen et al. (2018) establish the relationship that WE also predict JC. Important is how reciprocally WE affects the employees’ crafting behavior and how it plays a very vital role to keep employees engaged for more period.

Furthermore, it is also hypothesized and found that psychological capital mediates the association between WE and JCB. It’s a first study to our knowledge where PCB is dealt with as the mediator in this reciprocal relationship of, WE and JCB. Most of the research explains that employees with high psychological capital predict work engagement and job crafting behavior (Jessica et al., 2019; Karatepe & Karadas, 2015; Hussein et al., 2020). But there is one study which explains the reciprocal relationship of employees' psychological capital and job crafting behavior (Kerksieck et al., 2019). According to this study a person who is confident, hopeful, resilient, and self-efficient asks for more job resources and challenges at work. So, our study contributed in the similar manner that employees who are more engaged at work and have high psychological capital are more motivated to craft their jobs at work.
Practical and Managerial Implications
The current study can be helpful for the managers in the organizations to understand how more engaged employees with high psychological capital are more motivated to make their jobs more challenging. So, the managers can use the different strategies by which they can make their employees more engaged at work. As well as managers can imply the different pieces of training programs and courses at work by which the employee's psychological capital can be increased. Furthermore, this study also helps the managers to understand the importance of the job crafting concepts. This study also reveals the insights that support, and feedback should be given to the employees. So, the managers will become more helpful for the employees to make their job challenging in the organization.

Limitations and Future Research
This study also has certain limitations that must be recognized. First, this study is cross-sectional. All the questionnaires were delivered at one point in time, to make further predictions to infer the causality is difficult. A longitudinal research design could be used for future research. Secondly, we collected data by using the survey methodology so that's why our data was self-report in nature, which can lead to self-report biases. Hence, the limitations pertaining to data collection via questionnaires apply in this study. So other methods such as in-depth interviewing could be used in future research to test relationships. Future research may also try to replicate this study among faculty members in higher education institutions in other countries and cultures and the other occupational groups as well.

Ethical Considerations
Ethical Approval
All procedures used in this study which necessitated involvement from humans adhered with the ethical standards outlined by the institutional or national research committee. No animal research has been performed by the authors.

Informed Consent
All study participants had the option of providing their informed consent when questioned.

Conflict of Interest
The study did not come across any conflicts of interest.

References


Kerksieck, P., Bauer, G. F., & Brauchli, R. (2019). Personal and social resources at work: Reciprocal relations between crafting for social job resources, social support at work and psychological capital. Frontiers in psychology, 10, 2


