Validation of Job Crafting Scale in Indian Context

Savita Gupta, Anu Shifali

Abstract: Job crafting is self-inflicted modification of behaviors that employees engage in with the aim to support their jobs with their own passions, preferences and motives. It is a self-modification which changes the behavior and through which employee engage in their jobs with their own choices and interest. Job crafting is a concept in which one can change his job behavior and work with his own needs and values for the better development of the organization. Job crafting produce the positive behavior in the employee through which the worker of an organization is capable to give his best and develop comfortable environment among his fellow beings. Job crafting helps to produce strong and positive waves in an employee of an organization. The present paper intends to test the appropriateness of scale Job crafting by Maria Tims & Arnold B. Bakker (2011) in Indian perspective especially for university teachers. The confirmatory factor analysis and cronbach’s statistical technique was applied to find out validity and reliability of the scale in Indian context. Based on a sample of 200 respondents empirical evidence validate an outstanding fit of multidimensional structure of 20 items of job crafting scale in the Indian context and the internal consistency indicates alpha coefficient (α = .870) is satisfactory for the whole job crafting scale. The study has showed the appropriateness of the job crafting of university teachers.

Index Terms: Confirmatory factor analysis, Job crafting, scale validation, university teachers

I. INTRODUCTION

The term job crafting was developed in early 2000s. It was introduced by Wrzesniewski and Dutta (2001) the word job crafting means which produce the changes that are related with the mind and physical activity of a person, and change the boundaries of the job. According to Wrzesniewski and Dutta we can craft our jobs in different ways. At the first stage, employees can change the characteristics of their job so that their tasks related to the jobs should be performed better. Second stage covers the employees own characteristics of their jobs that they are in the right work place, and have in good relations with his or her colleagues at the work place. The self-initiated and self-medication changes provide a peaceful job environment which is very much important with the specific features of the employees. Third and last stage of job crafting is related with thinking abilities. When workers or employees craft their jobs at a work place without much help or support of an organization, they can change their work performance to improve the desired standards and services of the work.

Job crafting is associated with behavior modification and the limitations and situations of work (Wrzesniewski & Dutton, 2001).

Job crafting is related with the employee’s active role in modification of the behavior (Berg, Dulton & Wrzesniewski 2008, and Grant & Parker 2009). Job crafting means employees enhance their own goals of the work.(Times&Bakker2010). It is helpful for teachers to create new ideas in teaching and make their teaching profession more effective and creative. Job crafting makes actual changes in one’s own ability and personality. Crafting is about organizing group activities at work place, making efforts that employees know each other, talking initiative to give guild lines to new employees and making new relationships (Slem&Vella,Brodrick,2013). Employees can recognize their work, with whom they interact and make relations and at what type and how they behave and exhibit emotional entice with their work place. Job crafting is an encouraging aspect that changes the present scenario of the work (Grant & Parker 2009, Peeters, Taris & de jonge 2014).

The dominant feature of crafting the job is that employees change their responsibilities and make their work creative. Practical work behavior is also defined (Oldhan&fried2016). Proactive behavior is another form of job crafting. Job crafting is an innovative technique for the development in teaching profession and add new energy in that particular profession. Job crafting is basically designed for the active participation of the workers in their jobs and makes their job status more interesting and meaningful (Oldhan&fried2016). It is unveiled that interventions concerning Job crafting helps the employees to cope with organizational adjustment (Gorden et.al 2018)

II. LITERATURE REVIEW

Job crafting is a concept through which one can change his boundaries and it may include physical and social boundaries, in social boundaries an employee can enlarge his social circle and make better relationship with his fellow beings Wrzesniewski et al. (1997). The main aim is to transform the abilities and modification in the behavior for producing effective energy at the work place. A cognitive change refers to the emotional attachment with the organization and one can feel that organization’s problem is his own problem Times & Bakker (2010).
In the words of Grant and Ashford (2008) while job crafting employees can change and engage in work place with their own view point and work with their satisfaction through which they can enjoy work and wants to spend more time in their organization. The employees change their job conditions and make their job more interesting, and all the persons have different abilities and make their job more effective. It is initiated by the employee for making his work more interesting without the interference of the supervisor and it is primarily beneficial for oneself not for others (Wrzesniewski & Dutton, 2001, Times & Bakker, 2010).

Job crafting is mainly related with personal needs, skills, capacities, personality, and understanding (Oldham, 2010 and Times & Bakker, 2010). Job crafting related innovations comprises abilities and initiatives and organizational citizenship behavior and tasks related abilities (Grant & Parker, 2009) and distinguishing the work and deals (Times & Bakker, 2010, Wrzesnienski & Dutton, 2001). In the words of (Grant & Ashford, 2008, Grant & Parker, 2009, Parker et al, 2010) proactive action is self-initiated change in behavior.

Job crafting include four dimensions namely increasing structural job resources, decreasing hindering job demands, increasing social job resources and increasing challenging job demands (Times et. al 2012) these four dimensions works properly for the development of the employee and it is helpful for the development of the organization. Through this employee can change his stressful job in a meaningful job. In the words of Wrzesnienski and Dutton (2001) job crafting plays an important role first one is that employee wants to craft his job to control certain aspect of his job, second to motivate employees to create positive sense in the employee and third is to fulfill their basic needs with the connection with other employees.

Job crafting behavior included three aspects like resource seeking, challenges seeking and demand reducing. In job resource we include feedback of the employees and relationship with the employees and positive effects on work engagement of the employees and the employees can easily perform their job with full energy and enthusiastic way. The past researches show positive effect on job resources and job crafting Petrouts and colleagues (2012), Morgeson and Humphrey (2000) found that the employees relation with their co-workers should be positive and effective. And social support and organizational support should be with the employees. The positive relation of the organization with the employee should be effective and make good relation with the co-workers and make the environment more effective. And it produces the supportive environment to the organization.

III. OBJECTIVES OF THE STUDY
A. To examine the construct validity of the job crafting scale using confirmatory factor analysis.
B. To examine the reliability of job crafting scale by using internal consistency method.

IV. JOB CRAFTING SCALE
Job crafting scale is based upon modifications of human behavior and it is based on the emotional circumstances and brings changes in the work attitudes. And how one can totally changes his/her work conditions and with full enjoyment doing their work. In teaching line it is beneficial for the teachers to change their mood and work conditions for making their work more appealing. The scale has four dimensions and all four dimensions have good reliability. The scale consists of 21 items. The scale gives proper justification to all the areas included in it. Proper test – retest methods have been used or the scale.

Maris Tims Arnold B. Bakker (2011) constructed and validated the scale job crafting in the western cultural context. Review of related literature indicates that there is growing need of research to been conducted in India pertaining to measuring job crafting among university teachers in Indian context. There is need for the scale to be validated which measures job crafting among university teachers of Punjab, India. This inspires and motivates the investigator to test the appropriateness of the scale in the Indian context especially among university teachers.

V. METHOD
(A) Respondents
The sample constitutes faculty members of 8 universities 4 government and 4 private in Punjab, India. The sample of the study was 200 university teachers (i.e N= 200), 120 male and 80 females, who were selected via convenience sampling approach. Initially, out of three divisions in Punjab, two divisions were selected randomly. Then universities in the division were selected by random sampling technique. From these universities teachers were selected by convenience method technique. The sample comprised teachers of different universities from Punjab particularly in the age ranging from 40-60. Initially 300 questionnaires were distributed, and merely 238 participant’s responses were returned. The returned responses were carefully checked for inclusiveness, respondent objectivity, misplaced and inappropriate values (Hair et al. 2010) outliers were rejected statistically. Thirty Eight questionnaires were rejected due to unfilled and misplaced data. The scored and final dataset of 200 responses out of 200 university teachers 80 were female and 120 were male.

(B) Instrument
Scale constructed by Maria Tims Arnold B. Bakker (2011) has been used for the collection of the data.
The has four items i.e. Dimension one: increasing structural job resources, Dimension two: decreasing hindering job demands, Dimension third: increasing social job resources and Dimension fourth: increasing challenging job demands.

VI. RESULTS

A. Confirmatory Factor Analysis

CFA is a convenient procedure of statistics (Gerbing, & Hunter 1982), that is useful after evaluation of constructs along various statements, when there exist linear relationship between the questionnaire items and the questionnaire average or total, as well as during the time a researcher has initial information about which constructs assess which item. Confirmatory Factor Analysis enables the examiner to evaluate the hypothesis and the hypothesis states that there exists relationship between the quiescent constructs and underlying existed observed variables (Suhr, 2006).

Confirmatory factor analysis according to Sorbom & Joreskog, (2004) is a different case of structural equation modeling which is also recognized as a linear structural relationship model. The confirmatory factor analysis was applied using SPSS Amos 22 version to the four factors. The indices of the model were (CMIN/DF=1.304, Comparative fit index (CFI) =.955, goodness fit index (GFI) =.916, AGFI=.892, root mean square of approximation (RMSEA) =.036 and chi-square=212.518 (p>0.01). Figure 1 provides a holistic view of the Confirmatory Factor analysis model.

![Figure 1: Confirmatory factor analysis](image)

B. Reliability Analysis

Measurements obtained from samples called statistics, and the measures from sample to sample are about to vary. Reliability states to the quality of being trustworthy or of performing consistently well. Sample represents the population and the statistics are taken as the estimates of their parameters or population values. The accuracy of the estimate is a measure of the reliability of the statistics. Population values are hypothetical quantities obtained by taking into account the scores made by all of the members of the said population. They are known as true values such as, true mean. It is not possible to measure all of the members of a population, and therefore we have to rely on the sample values alone. The final set of statements was check for internal consistency using SPSS-22 version. The Cronbach’s alpha for the final set of statements was found out to be (0.870) which is given in table 1. Moreover the thumb rule by George & Mallery 2003 for the interpretation of alpha is 0.7 to 0.8 has acceptable internal consistency. So the estimation of reliability of the job crafting scale has acceptable internal consistency.

<table>
<thead>
<tr>
<th>Sr no</th>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>No of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Increasing structural job resources</td>
<td>.82</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Decreasing hindering job demands</td>
<td>.79</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Increasing social job resources</td>
<td>.77</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Increasing challenging job demands</td>
<td>.75</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Job crafting scale</td>
<td>.870</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 1. Reliability Statistics

VII. DISCUSSIONS AND CONCLUSION

The scale established in current study can assess the job crafting of university teachers. Foremost aim of this paper was to validate the scale which would produce reliable and valid outcomes in job crafting of university teachers. This research obtained on a wide literature review of researches assessing job crafting within a span of organizational environment. Current paper has introduced the meticulous methodological process to accomplish quantitatively validate a scale assessing job crafting of university teachers. The purpose of present study was to validate an instrument of job crafting constructed by Maria Tims Arnold B. Bakker (2011). Likewise, to measure the factor structure of the job crafting scale confirmatory factor analysis was applied.
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Confirmatory factor analysis was applied to find out the detailed structure of job crafting scale. The inspection of the results revealed that some indices are below the threshold level. The confirmatory factor analysis was applied using SPSS Amos 22 version to the four factors. The indices of the model were (CMIN/DF=1.304, Comparative fit index (CFI) =.955, goodness fit index (GFI) =.916, AGFI=.892, root mean square of approximation (RMSEA) =.036 and chi-square=212.518 (p=0.01). Figure 1 provides a holistic view of the Confirmatory Factor analysis model. After the inspection of the squared multiple correlations, variances and modification indices four statements were deleted. Empirical evidence demonstrates an excellent fit having final set of 20 items. The scale has ample theoretical reinforcement and also has adequate statistical support. The major previous empirical support for the factors of the scale was retained in the scale after applying CFA. The result of confirmatory factor analysis of the job crafting scale has given admirable results and affords support to the job crafting scale (2011) this study has proved the suitability of the job crafting among university teachers.

VIII. LIMITATIONS

In current study, investigator has applied extremely reliable as well as valid scale development processes, still this have few drawbacks. The foremost drawback is that confirmatory factor analysis procedures used for the scale rectification are completely based on specific sample-size. Current research has a complete literature support and rationale for using these procedures, however, to achieve best outcomes a large size of sample is recommended. The research assesses three dimensions of job crafting scale and this scale based on Likert 5-point varies from very often to never. More investigation is required to measure the concurrent as well as discriminant validity. The major problem of this current scale development is the complication as well as discriminant validity. The major problem of this current scale development is the complication related with producing scores which are reliable and valid.

IX. SUGGESTION FORFURTHER RESEARCH

The confirmatory factor analysis was carried out on relatively sample size specific. For the accurate results one should have larger sample size that is more affected for the research purpose and/or confirmatory factor analysis. The scale is used to measure the job crafting among university teachers only. This gap needs to be covered because the concept is belief in cognition is not age specific or limited by age. Future research must seek to determine this scale appropriateness for use with other populations. Moreover, qualitative study can be more beneficial and new research to explore the behind positive and negative beliefs. In addition further research can be made with the job crafting and job performance of university teachers.

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