

Relationship between Innovative Work Behavior and Job Involvement among the Employees of Telecom Sector

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The present study aimed at exploring the relationship between innovative work behavior and job involvement among the employees of telecommunication sector. A sample of 300 employees, 200 men and 100 women ($Mage = 29.99$, $SD = 6.40$) were recruited from the telecom sector of Pakistan. Innovative work behavior and job involvement were measured using the Innovative Work Behavior Scale (Butt, 2006) and the Job Involvement Scale (Lodhal & Kejner, 1965) respectively. Correlation analysis showed innovative work behavior and job involvement to be positively related to each other. Independent sample t-test showed significant mean differences in gender on innovative work behavior and non-significant mean differences in job involvement. Non-significant mean differences were also found in education on innovative work behavior and job involvement. One way ANOVA showed significant mean differences in income groups on innovative work behavior and job involvement. Linear regression analysis showed that job experience had significant impact on innovative work behavior but non-significant impact on job involvement. Limitations and implications of the study are also discussed.

Keywords: Innovative work behavior, Job involvement, Employees, Telecom Sector

In the rapidly changing competitive work environment, organizations are increasingly faced with the need to get engaged into innovative work behaviors to get enduring competitive work advantage and delivering newly developed product. Changing surroundings, access of the people to the information, changing demands of the clients, new and advanced technology, and rapidly changing circumstances play an important role in today's expanding world. Rapidly changing hierarchical needs and demands of the customers and suppliers put a great deal of emphasis on employees' innovative work behavior nowadays (Jung, Chow, & Wu, 2003; Yukl, 2002).

To meet this challenge, successful organizations, nowadays, prefer to hire innovative employees (Ramamoorthy, Flood, Slaterry & Sardesai, 2005). Getz and Robinson (2003) reported that eighty percent ideas in the organization are generated by employees who are innovative. Although innovative work behavior is considered closely related to employees creativity, it entails more than creativity. Miron, Erez, and Naveh (2004) demonstrated that people with high creativity do not show high innovation always. Innovative work behavior intends to bring some benefit to the organization and it encompasses a clear applied component (de Jong & den Hartog, 2007). Therefore, it is agreed among researchers that employee creativity is the component of innovative work behavior (Amabile, 1988). It involves production of useful and new ideas regarding services, products, procedures and processes. It also involves newly created ideas to be implemented (Anderson, de Dreu & Nijstad, 2004; Axtell, Holman, Unsworth & Wall, 2000).

De Jong (2007, p. 8) described innovative work behavior as "the intentional behavior of an individual to introduce and apply new

ideas, products, processes, and procedures to his or her work role, unit, or organization". There are four interconnected components of innovative work behavior. These four components include problem recognition, idea generation, idea promotion and idea realization. Problem recognition and idea generation together constitute creativity oriented work behavior and idea promotion and idea realization together constitute implementation oriented work behavior. Kanter (1988) speaks of 'kaleidoscopic thinking' and defined idea generation as regeneration of a new whole from already existing pieces. Most of the innovative ideas are unclear and vague and people do not accept them initially. A collective will and desire is needed for the acceptance of new ideas that have been given by the innovators. In the phase of idea implementation ample and extensive efforts are needed to get the benefits of the newly created ideas (Kleysen & Street, 2001). Organizations follow a series of steps in the idea implementation phase in order to get successful results of the newly constructed idea (Kanter, 1988).

More precisely, innovative work behavior consists of a set of behaviors that includes at first idea generation and exploration of opportunity to recognize and look for the opportunity needing innovation. Next, support and recognition is sought through promotion of newly developed idea. Finally, the newly developed idea is developed, modified after testing and commercialized (de Jong, & den Hartog, 2010; Janssen, 2000).

"Job involvement is the degree to which one is cognitively preoccupied with, engaged in, and concerned with one's present job" (Paullay, Alliger & Stone-Romero, 1994, p. 224). Bakalis (2006) described job involvement as employee's entanglement, interest and absorption in the tasks, goals and culture of his/her organization. Job involvement is considered as a personal characteristic of an employee. Because there are certain personal attributes that affect the involvement of an employee in a job. It depends upon the needs and values of a person that either his level of involvement in the job will be less or more. Various demographic variables also affect the involvement of employees in their jobs. Age, gender, level of education, authority given, marital

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status and job skills etc.; all these variables are linked up with the job involvement. All these factors affect the job involvement (Rabinowitz & Hall, 1977). According to Yoshimura (2007) there are three dimensions of job involvement; they are, affective job involvement, cognitive job involvement, and behavioral job involvement. Those employees who are emotionally stable, they are more involved in their jobs as compared to the neurotic employees (Clarke & Robertson, 2005). Extrovert employees are also more involved in their jobs; they bring about new ideas in the firm (Hurley, 1998). Agreeable employees are more beneficial for their firms (Cooper, 2003). Employees who have low conscientiousness level give less importance to their job so they are less involved in their jobs (Arthur & Doverspike, 2001).

Those employees who show more innovative work behavior also show more job involvement, as higher innovation is the result of employee's higher concentration in the work, meaning increased involvement in the job (Daft, 2004). Job involvement helps employees to work wholeheartedly for their organization in solving the problems and several different issues of their organization (Rogelberg, 2007). According to Brown (2007, p. 397-399), "innovative work behavior is helpful to organizational production and effectiveness requiring deep involvement of the employees in their work by giving them autonomy and making the work experience meaningful to them." Katz (1964) asserted that, for increasing the efficiency of the firm, it is important that the innovative work behavior is taken into account, as new ideas are given more importance nowadays as compared to the conventional ideas. To remain in the market it is important that the innovative work behavior of the employees is encouraged (Amabile, 1988). When the employees who have high innovation they were compared when the employees of low innovation, it was observed that those employees who have high innovation they were also more involved in their job (Frone & Major, 1992).

When an employee is motivated he/she will show more job involvement (Brown, 1996). Employees show more innovation in their job when they are highly involved in their job. Those employees who are more energetic and excited show more innovation in their work. They put substantial efforts to put their ideas into reality. These employees work hard to implement their ideas and to bring them in working condition. Motivated employees show more concern for their job and also for the organization they work for (Organ, Podsakoff & MacKenzie, 2006).

Leong and Rasli (2014) found a positive relationship between age and innovative work behavior while studying the relationship of innovative work behavior with work role performance. One way ANOVA results of their study showed that innovative work behavior is increased with increasing age. Leong and Rasli (2013), found similar finding regarding relationship of age with innovative work behavior in another study as well. Messmann, Mulder and Gruber (2010) also reported a positive relationship of age and job experience with innovative work behavior. Gorji, Etemadi, and Hoseini (2014) found a positive relationship between age and job involvement while they were studying the relationship of job involvement with perceived organizational support in Iranian healthcare system. Similarly, Manikandan and Jayan (2006) also found out that as the age increases, employees' job involvement also increases. Khan, Jam, Akbar, Khan and Hijazi (2011) found a positive relationship between employees' job experience and their job involvement while they were exploring the

relationship job involvement with employee commitment in Pakistani perspective.

Newman (1975) found a positive relationship between education and job involvement, as the education increases the involvement in the job also increases. A number of researches have reported that males are more involved in innovative work behavior. The findings of a study suggested that men reflected more innovative work behavior as compared to women (Arif, Zubair & Manzoor, 2012). Ueda (2012) found that females are less involved in their jobs as compared to males. Female employees are more relationship oriented at their work place than being task oriented. Therefore, they show less job involvement as well as less innovative work behavior in their job settings. Males accept the failure easily as compared to the females. Female get fear of failure, therefore they avoid new ideas. Due to this reason their creativity remains hidden and they limit themselves to the routine work (Reuvers, Van Engen, Vinkenburgh & Wilson-Evered, 2008).

Where this study has explored the mutual relationship of innovative work behavior and job involvement and their relationships with the other demographic variables in hypothesized manner, it will also explore the relationship all the dimensions of innovative work behavior with gender and education. Based on the literature, mentioned above, following hypotheses were proposed for this study;

1. Innovative work behavior is positively related to job involvement.
2. Age will positively predict innovative work behavior and job involvement
3. Job experienced will positively predict innovative work behavior and job involvement
4. Men will be higher on innovative work behavior and job involvement as compared to women.
5. Higher is the education, higher is innovative work behavior and job involvement

Method

Sample

The sample of the present study comprised of 300 employees from cellular companies and internet service providers. In the sample, minimum age range ($Mage = 29.99$, $SD = 6.40$) was set to be 20 years as inclusion criteria. Participants of the study included

Table 1
Demographic Characteristics of the Sample (n = 300)

| Variable | M (SD) | f | % |
|--|--------------|-----|--------|
| Age | 29.99 (6.40) | | |
| Job Experience in Current Organization | 5.90 (4.96) | | |
| Gender | | | |
| Male | | 200 | 66.66% |
| Female | | 100 | 33.33% |
| Total | | 300 | 100 |
| Education | | | |
| Graduates | | 136 | 45.33 |
| Post-Graduates | | 164 | 54.67% |
| Total | | 300 | 100 |

Note: M = Mean, SD = Standard Deviation, f = Frequency, % = Percentage

200 male and 100 female employees. Employees were categorized into graduates and postgraduates for education. Job experience of the participants was found to have mean of 5.90 years with 4.96 standard deviation. The organizations selected for data collection were Warid, Ufone, Telenor, Wateen, PTCL, Mobilink and Zongin Islamabad.

Instruments

Innovative work behavior scale was used to measure innovative work behavior, developed by Butt (2006). It was a five point rating scale with 28 items. Its alpha reliability was .94 (Butt, 2006). The scores ranged from very little extent (1) to greater extent (5). Sample items of the scale include "I generate ideas to improve or redesign services/activities that my department provides" and "I carry out new experiments within my work".

Job involvement scale was used to measure job involvement. It was developed by Lodahl and Kejner (1965). It was a five point likert type rating scale with 20 items. Its alpha reliability was found to be .71 (Brown, 1996). The items range from strongly agree (5) to strongly disagree (1). Sample items of the scale includes "I am very much involved personally in my work" and "The most important things that happen to me involve my work".

Procedure

For the purpose of data collection, formal permission was sought from the respective management of the organizations, after which the participants were contacted individually. They were briefed about the purpose and objectives of the study. Confidentiality was assured, and the participants were informed that their identities would be protected at all stages of the research. After distributing

the set of psychometric tests, the participants were given oral instructions, along with written instructions. The information sought included demographic information sheet along with test instruments. Demographic information sheet included information regarding age, gender, education and job experience. The data collected were then analyzed using various statistical techniques.

Results

In the current study, to explore the relationship of employees' job involvement with innovative work behavior, Pearson product moment correlation was computed. To measure the predictive role of age and job experience on innovative work behavior and job involvement, linear regression analysis was applied on the data. Moreover, to measure the mean differences in gender and education, independent sample t-test was applied on the data.

Table 2 indicates the correlation coefficient between innovative work behavior and job involvement. Innovative work behavior was found to be positively related with the job involvement ($p < .01$). All the sub-scales of innovative work behavior were also found to be positively related with the job involvement ($p < .01$). This table also showed the alpha reliabilities of all the scales and sub-scales used in the study.

Table 3 shows that age positively predicted both job involvement and innovative work behavior. Age showed 1% variance in job involvement while it showed 4% variance in innovative work behavior.

Table 4 shows that job experience positively predicts innovative work behavior while its relationship with job involvement was found to be non-significant. Job experience caused 2% variance in innovative work behavior while it did not caused any variance in job involvement.

Table 2

Interscale correlation among study variables and Reliability coefficients of the scales (N=300)

| Scales | Alpha reliability | JI | IWB | IP | WC | IG | II |
|---------------------|-------------------|-------|-------|-------|-------|-------|----|
| JI | .75 | - | | | | | |
| IWB | .91 | .31** | - | | | | |
| Idea promotion | .80 | .18** | .80** | - | | | |
| Work commitment | .64 | .26** | .66** | .42** | - | | |
| Idea generation | .79 | .19** | .80** | .54** | .58** | - | |
| Idea implementation | .86 | .32** | .89** | .56** | .52** | .60** | - |

Note. JI= Job involvement; IWB= Innovative Work Behavior, IP= Idea promotion; WC= Work commitment; IG= Idea generation; II= Idea implementation
 p**<.01

Table 3

Linear Regression analysis showing the effect of Age on job involvement and innovative work behavior (N=300)

| Variables | B | SE | β | Age | |
|-----------------|-------|-----|---------|-------|-------|
| | | | | LL | UL |
| Constant | 61.60 | | | 56.15 | 67.06 |
| Job Involvement | .13 | .09 | .10 | -.04 | .31 |
| R ² | .01** | | | | |
| Constant | 84.71 | | | 73.77 | 95.66 |
| IWB | .49 | .18 | .20 | .13 | .86 |
| R ² | .04** | | | | |

Note. IWB= Innovative Work Behavior
 **P<.01

Table 4

Linear Regression analysis showing the effect of job experience on job involvement and innovative work behavior (N=300)

| Variables | Job Experience | | | | |
|-----------------|----------------|-----|---------|-------|-------|
| | CI (95%) | | | | |
| | B | SE | β | LL | UL |
| Constant | 64.69 | | | 62.88 | 66.50 |
| Job Involvement | .13 | .11 | .07 | .10 | .36 |
| R ² | .005 | | | | |
| Constant | 95.87 | | | 92.43 | 99.30 |
| IWB | .51 | .23 | .15 | .05 | .97 |
| R ² | .02* | | | | |

Note. IWB= Innovative Work Behavior

*P<.05

Table 5

Mean Differences among male and female employees in innovative work behavior and job involvement (N=300)

| Variables | Males | | Females | | t(298) | p | 95% CI | | Cohen's d |
|---------------------|---------|-------|---------|-------|--------|-----|--------|------|-----------|
| | (n=200) | | (n=100) | | | | LL | UL | |
| | M | SD | M | SD | | | | | |
| JI | 66.34 | 8.29 | 63.35 | 9.88 | 2.54 | .01 | .67 | 5.30 | .32 |
| IWB | 99.46 | 16.22 | 97.20 | 14.70 | .93 | .34 | -2.49 | 7.02 | - |
| Idea promotion | 23.90 | 5.57 | 25.24 | 4.71 | .03 | .05 | -2.70 | .01 | - |
| Work commitment | 10.42 | 2.50 | 10.17 | 2.35 | .79 | .42 | -.37 | -.88 | - |
| Idea generation | 21.56 | 4.13 | 21.26 | 4.33 | .55 | .58 | -.77 | 1.37 | - |
| Idea implementation | 41.95 | 7.88 | 41.61 | 6.95 | .32 | .74 | -1.70 | 2.38 | - |

Note. JI= Job involvement; IWB= Innovative Work Behavior

Table 6

Mean difference in education on innovative work behavior, its sub scales and job involvement (N=300)

| Variables | Graduates (n=136) | | Post-graduates | | t(298) | P | 95% CI | | Cohen's d |
|---------------------|-------------------|-------|----------------|-------|--------|-----|--------|-------|-----------|
| | | | (n=164) | | | | | | |
| | M | SD | M | SD | | | LL | UL | |
| JI | 66.53 | 8.92 | 64.86 | 9.12 | 1.50 | .13 | -.51 | 3.87 | - |
| IWB | 96.55 | 15.81 | 100.68 | 15.61 | -1.89 | .05 | -8.42 | .16 | - |
| Idea promotion | 23.23 | 5.50 | 25.23 | 5.06 | -3.21 | .00 | -3.22 | -.77 | .37 |
| Work commitment | 10.00 | 2.61 | 10.70 | 2.32 | -2.42 | .01 | -1.28 | -.13 | .28 |
| Idea generation | 20.34 | 4.23 | 22.37 | 3.94 | -4.06 | .00 | -3.01 | -1.04 | .49 |
| Idea implementation | 41.10 | 7.60 | 42.64 | 7.63 | -1.59 | .11 | -3.42 | .35 | - |

Note. JI= Job involvement; IWB= Innovative Work Behavior

Results in table 5 showed significant mean differences only on job involvement. Males were found to be more involved in their job in comparison to their female counterparts. Non-significant mean differences were found on innovative work behavior and all its dimensions.

Table 6 showed non-significant mean differences on job involvement as well as innovative work behavior. While significant mean differences were found on the three sub-scales of innovative work behavior. Post-graduates were found to be higher in idea promotion, work commitment and idea generation in comparison to graduates.

Discussion

It was hypothesized that Innovative work behavior and job involvement are positively related to each other among the

employees of telecom sector (Hypothesis I). The finding of the present study shows positive correlation between innovative work behavior and job involvement (See Table 2). In a work environment where innovation is encouraged and valued in the whole organization, employees' innovative capabilities are enhanced through observing people that successfully engage in innovative work behavior and they involve in their jobs more. Innovative employees are more involved in their jobs (Chen & Chen, 2007). All the dimensions of innovative work behavior (i.e. idea promotion, idea generation, idea implementation and work commitment) were also found to be positively related with job involvement. Job involvement has significant positive relationship with idea promotion ($r=.18$, $p<.01$), idea generation ($r=.19$, $p<.01$), work commitment ($r=.26$, $p<.01$) and idea implementation ($r=.32$, $p<.01$).

To confirm the second hypothesis of the study, linear regression analysis was applied in order to see the effect of age on innovative work behavior and job involvement. Results of the study showed age to be positively predicting innovative work behavior and job involvement among the employees of telecom sector in Pakistan, hence confirming our 2nd hypothesis (See Table 3). In a previous study it has been demonstrated that increase in age has a positive effect on the innovative behaviors. With the advancement in the age it is observed that the person starts focusing on the job more and shows more involvement in his/her tasks. And as the age increases, employees gain more authority due to their experience that impels innovative work behavior among them (Gorji, Etemadi & Hoseini, 2014; Parotta, Pozzoli & Pytlikova, 2014; Schneider, Macey, Barbera & Martin, 2009).

Third hypothesis of the study assumed job experience to be positively predicting innovative work behavior and job involvement among employees of telecom sector. Results of the study partially supported this hypothesis, as job experience was found to be positively predicting innovative work behavior only. It did not show any predictive role in increasing employees' job involvement (See Table 4). Amabile, (1997) also demonstrated that with increased experience in a job increases the innovative work behavior also increases. The employee learns new and advanced way to perform a job and do a task. Employee brings out innovation in their work as their experience increases. Authority and power increases with experience and the employee start enjoying their work and starts bringing innovation. Similar finding was reported by Leong and Rasli (2014). Similarly, Rabiowitz and Hall (1977) argued that if the employees are working in their place of interest, they will enjoy working and they will be more involved in their job. They will be more concerned about their work and they will spend more time in improving their work. So, the motivational and work environmental factors seem more important while predicting job involvement. Gorji, Etemadi, and Hoseini (2014) also reported job experience to have a non-significant relationship with job involvement.

Fourth hypothesis of this study predicted male employees to be higher on innovative work behavior and job involvement, as compared to female employees. This hypothesis also got partial support from the data of this study as males were found higher in job involvement only. Data showed no variability in gender on innovative work behavior (See Table 5). Ueda (2012) found that females are less involved in their jobs as compared to males and argued that female employees are relationship oriented and have a stronger tendency to try to make friends and emphasize human relationships in an organization. While males are task oriented in their orientation. They pay more attention to their task fulfillment than relationship building. A study conducted by Bysted (2013) also demonstrated that gender has no effect on innovative work behavior. Similarly, in terms of gender differences on innovative work behavior, Leong and Rasli (2014) also reported non-significant mean differences in gender on innovative work behavior.

Fifth hypothesis of this study predicted a positive relationship of education with innovative work behavior and job involvement among employees of telecom industry. The data of the study did not support this hypothesis. A non-significant mean difference was found among graduates and post-graduates on innovative work behavior and job involvement. While post-graduates scored higher on idea promotion, work commitment and idea generation subscales of innovative work behavior (See Table 6). It can be attributed to the reason that both job involvement and innovative

work behavior are linked to an employee's inherent tendencies while education is an external factor that may have no relationship with these two variables of the study. Leong and Rasli (2014) also reported non-significant relationship between education and innovative work behavior. Similarly, Marshall, Lassk and Moncrief (2004) also reported a non-significant relationship between level of educational and job involvement.

Conclusion

In the current study, innovative work behavior and its all four dimensions were found to be positively related to job involvement. Age was also found to be positively predicting innovative work behavior and job involvement. Whereas, job experience only predicted innovative work behavior in positive direction. In terms of gender, only job involvement was shown to have significant mean difference where males scored higher than females on job involvement. Furthermore, non-significant mean difference were found in education on innovative work behavior and job involvement.

Limitations and Suggestions

The sample was not the representative of all telecommunication industries of Pakistan, it only represented the telecommunication industries of Islamabad. Therefore the generalization in relation to the telecommunication industries at the national level could not be made common. The other potential threat to the findings of this research could method variance. Only self-report measures were used in the present study. Self-report measures involve their own biases on part of the self-reporting employees. Future researches should use other methods of data collection for cross validation of the findings.

Future Implications of the Study

The present study can be very useful in studying the importance of innovative work behavior and job involvement among the employees of telecom sector; because when an employee will have more innovative work behavior the firm will get more benefit from his ideas and thoughts. It will be helpful in selection, appropriate placement and other developmental perspectives of the employees in telecom sector. In order to ensure the competitive edge, the organizations should provide more support to the experienced employees, as their higher experience is closely related to their innovative work behavior and job involvement.

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