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Engineers Innovative Work Behavior: The Role of Emotional Intelligence

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Abstract
This paper intends to examine the relationship between Emotional Intelligence, and Innovative Work Behavior among telecommunication engineers in Jordan telecommunication Industry. Its purpose is to study the effect of Emotional Intelligence of the engineers on their Innovative Work Behavior. A total of 218 questionnaires were collected from telecommunication engineers working in telecommunication organizations in Jordan. The data were analyzed using Partial Least Squares (PLS). Findings of this study found that Emotional Intelligence has a positive and significant relationship with Innovative Work Behavior. These findings provide an understanding about the Emotional Intelligence of the engineers and its effect on Innovative Work Behavior. To improve the Innovative Work Behavior among engineers, telecommunication organizations should focus on the Emotional Intelligence of the engineers to promote their Innovative Work Behavior.
Keywords: Innovative Work Behavior, Emotional Intelligence, Engineers, Telecommunications, Jordan.

1. Introduction

While the Middle East may conjure up images of war, Jordan is a small safe country with scarcity of natural resources located in the Middle East region (Department of Statistics 2015). The scarcity of natural resources -such as oil and gas- has pressed the country to focus on the service industry. Service industry in Jordan accounted more than 67% of the national GDP in 2013 and employed more than 70 percent of the total labor force (Central Bank of Jordan 2014, Central Intelligence Agency 2014, Information and Communication Technology Association-Int@j 2014).

Within the Jordan service industry, telecommunication industry is considered the largest contributor to the nation GDP with approximately 15.1% of the nation's GDP in 2013 (Central Bank of Jordan 2014). Acknowledging the telecommunications industry as the largest contributor to Jordan's economy as well as one of the foremost employers, the success and sustainability of telecommunication industry is vital.

Scholars and practitioners claimed that for any technology based industry to survive and stay competitive in the business, innovation is the key (Burns and Stalker 1961, Bass 1985, Damanpour 1991, Scott and Bruce 1994, Laursen and Foss 2003, Jiménez-Jiménez and Sanz-Valle 2005). Similarly, the Ministry of Information and Communication Technology of Jordan has advised telecommunication organizations in the country to keep abreast with innovation in order to enhance the competitiveness of the country (Ministry of Information and Communication Technology 2012).

de Jong (2007) stated that the innovation of an organization is the result of its employees' innovative behavior. In the context of telecommunication industry, it is recognized that telecommunication engineers possess in-depth knowledge and therefore are acknowledged as the backbone of the telecommunications industry (Baugh and Roberts 1994, Job Responsibilities 2014, Queensland Government 2014). Telecommunication engineers often work on systems and equipment that are new and complex. They are expected to provide the best solution for the lowest cost to the organization (Queensland Government 2014). This often calls for the identification of creative solutions to problems. This pointed to the fact that innovative work behavior (hereinafter labeled as IWB) among engineers would be the key in achieving the competitiveness and sustainability of the organization (Muthuveloo and Raduan 2005, Abdul Hamid and Yahya 2011, Ministry of Information and Communication Technology 2012, Queensland Government 2014)

According to Scott and Bruce (1994), IWB refers to "the production or adoption of useful ideas and idea implementation, and begins with problem recognition and the generation of ideas or solutions" (p. 581). Problem recognition and ideas or solutions generation, either novel or adopted, are the first step of individual innovation. The process of seeking a sponsorship for an idea and attempts to build a coalition of supporters for the idea is the second stage of individual innovation. The third stage of this process is to materialize the idea.

Given the importance of IWB among employees, a myriad of research undertaken cultivates and promote this form of behavior. In particular, Emotional Intelligence (hereinafter labelled as EI) has been identified as one of the key contributor in enhancing IWB (Abubakr and Al-Shaikh 2007, Jafri, Dem et al. 2016). According to Cherniss (2001) and Fenwick (2003), the display of IWB is closely related to employees' EI, specifically individuals' ability to monitor their own and others' feelings and emotions, to discriminate among emotions, and to use this information to guide thinking and action (Salovey and Mayer 1990). Several studies have revealed that employees with higher EI are more motivated in the workplace, more productive (Diggins 2004, Brooks and Nafukho 2006), and displayed better job performance (Wong and Law 2002, Steve 2004). In addition, several

studies have consistently concluded that EI is positively related to IWB (Cherniss and Goleman 2001, Abubakr and Al-Shaikh 2007, Dincer, Gencer et al. 2011, Jafri, Dem et al. 2016).

Furthermore, glancing through the previous literature shows that studies on EI were mainly among organization's leaders, as well as how leader's EI affect employees' behavior and organization outcomes (e.g. Carmeli, 2003; Dincer et al., 2011). Meanwhile, limited studies have examined the EI of employees and its effect on their work behavior such as IWB (e.g. Abubakr & Al-Shaikh, 2007; Carmeli & Josman, 2006). This paper aims to fill this gap by examining engineers' EI and its effect on their IWB.

Even though results of EI have a well-founded base in the western countries (e.g. Steven, Peter et al. 2009, Tomas and Aelita 2010, van der Linden, van Klaveren et al. 2015), very limited research can be found in the Arab region specifically Jordan (e.g. Abubakr and Al-Shaikh 2007, Ahammed, Abdullah et al. 2011). Moreover, According to Hofstede (2005), Arab's culture is considered as having a collectivist orientation, and strong uncertainty avoidance and since cultural norms may have affected one's EI (Wong, Law et al. 2004, Fernández-Berrocal, Salovey et al. 2005), past studies that were conducted in western context may not be able to be generalize to Arab subjects. Abubakr and Al-Shaikh (2007) noted the scarcity of research about the effect of EI within the Arab's world. Hence, this paper aims to address the effect of EI on IWB in Jordan.

2. Literature Review

2.1 Innovative Work Behavior (IWB)

According to Farr and Ford (1990), work role innovation is "the intentional introduction within one's work role of new and useful ideas, processes, products, or procedures" (p. 63). While Spreitzer (1995) defined IWB as the reflection of creating something new or different. Scott and Bruce (1994) defined IWB as the production of useable products, processes, or services that were originated from problem identification and ideas generation. Being inspired by Scott and Bruce (1994), Janssen (2000, Janssen 2004) viewed IWB in the workplace as a complex behavior, which consists of three essential processes namely: idea generation, idea promotion, and idea realization. Idea generation refers to the production of novel and useful idea in any domain (Kanter 1988, Amabile, Conti et al. 1996). Idea promotion involves finding potential allies that can help in powering up the generated idea (Kanter 1983, Kanter 1988) while idea realization concerns about producing a prototype or a model of the innovation that can be experienced and ultimately applied within a work role, group, or total organization (Kanter 1988). Janssen (2000) contribution to IWB development can be considered as a significant progress (de Jong 2007). Although Janssen (2000) views IWB as consisting three main stages, he deduced that his items are best combined into one single additive scale (de Jong 2007). In harmony with Janssen (2000), Janssen (2004), the present study conceptualizes IWB as a complex behavior, which consists of three essential processes namely: idea generation, idea promotion, and idea realization.

According to Battistelli, Montani et al. (2013), in order to keep up with organizational high demands, IWB can assist employees to become acclimated to meet job and organizational-related requirements in those contexts. Employees who are innovative are those who have been driven, motivated and empowered by the organization (Schaufeli and Bakker 2004). Telecommunication engineers often work on systems and equipment that are new and complex. They are expected to provide the best solution for the lowest cost to the organization (Baugh and Roberts 1994). This often calls for the identification of creative solutions to problems. In particular, the IWB among engineers would be the key in achieving the competitiveness of the organization (Muthuveloo and Raduan 2005, Abdul Hamid and Yahya 2011, Ministry of Information and Communication Technology 2012, Queensland Government 2014).

2.2 Emotional Intelligence (EI)

EI is an increasingly popular consulting tool. The concept of EI was drawn from the concept of social intelligence by the notable research of Thorndike (1920). Specifically, social intelligence refers to "the ability to understand and manage men and women, boys and girls, and to act wisely in human relations" (Thorndike 1920). EI as a term was introduced in the 1990s.

EI was presented and conceptualized by Salovey and Mayer (1990). They define EI as "the ability to perceive emotions, to access and generate emotions so as to assist thoughts, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (Mayer and Salovey 1997). The later definition suggests that EI comprised of four dimensions: the appraisal and expression of self-emotions, the appraisal and recognition of emotions in others, the regulation of self-emotions, and the use of emotions to facilitate performance (Mayer and Salovey 1997, Wong and Law 2002).

This study conceptualizes EI as ability approach as in Mayer and Salovey (1997) and Wong and Law (2002) for several reasons. First, in harmony with previous studies in the field of organizational behavior (Day and Carroll 2004, Kim and Agrusa 2011, Kim, Jung - Eun Yoo et al. 2012). Second, According to Berman and West (2008), "The concept of EI acknowledges that although emotions are non-cognitive in nature, people can learn to recognize what they feel" (p. 743), implies that EI is a form of ability that can be learned and developed

(Cherniss and Goleman 2001, Berman and West 2008). Last, the conceptualization of EI from Wong and Law (2002) are commonly used due to its brevity and reputation as a psychologically sound measure that can be used in the management field (Law, Wong et al. 2004, Kim and Agrusa 2011, Kim, Jung‐Eun Yoo et al. 2012).

According to Mayer and Salovey (1997), appraisal and expression of emotion in the self-relates to the individual's ability to understand their emotions and be able to express these emotions naturally. People who acknowledge their emotions well are believed to possess a higher self-emotional appraisal than others who do not (Wong and Law 2002, Wong, Law et al. 2004). Meanwhile, appraisal and recognition of emotion in others relates to peoples' ability to perceive and understand the emotions of those people around them (Salovey and Mayer 1990, Mayer and Salovey 1997). People who are considered more sensitive to the feelings of emotions of others as well as reading their minds are assumed to have acquired a high level of this ability (Wong and Law 2002, Wong, Law et al. 2004). While regulation of emotion in the self-relates to the ability of people to regulate their emotions, which will enable a more rapid recovery from psychological distress (Salovey and Mayer 1990, Mayer and Salovey 1997). According to Wong, Law et al. (2004), an individual who has the ability to maintain his behavior controlled even when he has extreme moods, is believed to have a high regulation of emotion.

Last but not least, use of emotion to facilitate performance relates to the ability of individuals to make use of their emotions by directing them towards constructive activities and personal performance (Salovey and Mayer 1990, Mayer and Salovey 1997). A person with great ability in this area maintains positive emotions most of the time. They make the very best use of their emotions to facilitate higher performance in the workplace and their personal lives (Wong and Law 2002, Wong, Law et al. 2004).

Despite the deficiency of empirical research in EI, review of past studies have revealed that EI is positively related to IWB. For instance, Abubakr and Al-Shaikh (2007) in their study on 500 employees from 19 different organizations across the United Arab Emirates, they found that employees with higher levels of EI have higher levels of readiness to create and innovate than those who reported lower levels of EI. Likewise, the research conducted by Dincer, Gencer et al. (2011) among 57 senior and mid-level managers of the Turkish retail sector found that high level of EI is positively correlated to high level of IWB.

2.3 Emotional Intelligence, and Innovative Work Behavior

Few mechanisms can explain why EI can lead to IWB. First, employees with high EI tend to have a better relationship with their co-workers (Wong and Law 2002). This in turn leads to more informational exchange among co-workers, which enable them to create ideas for difficult issues, and generate original solutions to problems at work, which characterized as idea generation. In addition, employees with high EI are more likely to have peace of mind, stable life and be more focused (Abubakr and Al-Shaikh 2007). This assist them to evaluate the utility of innovative ideas, introduce innovative ideas into the work environment in a systematic way, and being able to transform innovative ideas into a useful application, which characterized as idea realization. Last but not least, employees with high EI tends to stay positive (Ivcevic, Brackett et al. 2007), which leads them to inspire their co-workers to embrace innovative ideas. With their positivity, employees are likely to display a broad way of thinking and flexibility (Ivcevic, Brackett et al. 2007). This, in turn, fosters their ability to mobilize support for innovative ideas, and acquire approval for innovative ideas which is characterized as idea promotion.

According to Cooper (1997), previous research uncovered that properly managed emotions can not only enhance the accomplishments of individuals, teams, and organizations, innovations, and increase in productivity gains, it also have enhanced trust, loyalty, and commitment of the individuals. In addition to the positive association between EI and work performance, various studies also suggested that people with higher EI are more likely to display extra-role behaviors. For instance, in their study of 134 adolescents in a youth military summer camp, Charbonneau and Nicol (2002) reported that youths with higher EI are more likely to display altruism and civic virtue. Likewise, Carmeli and Josman (2006) also discovered the link between EI and altruism and compliance.

In another vein, in the study of Wong and Law (2002) among 149 supervisor–subordinate dyads, demonstrated the greater EI of employees led to greater job performance. Corroborating with this findings, in a study among 332 employees working in state-owned and private banks in Turkey, Dincer and Orhan (2012) found that there is a significant relationship between employees' EI and IWB. Based on the proceeding discussion, it is postulated that:

H2: EI will have a positive and significant relationship with IWB.

Based on the preceding discussion, a research model was developed as shown in Figure 1.

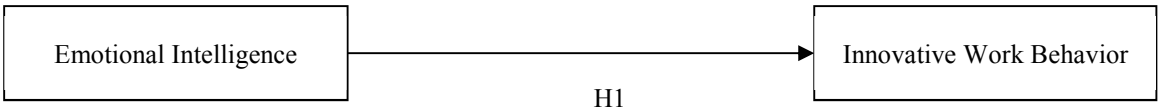

Figure 1 Framework of the Study

3.0 Methodology

3.1 Sample and Procedure

The population in this study consisted of telecommunication engineers working in the top three telecommunication organizations in Jordan. A total of 400 of questionnaires were distributed. 277 questionnaires were received. This yielded a response rate of 69.25%. However, 59 questionnaires were discarded. Thus, only 218 questionnaires were usable. The final response rate was 54.50%. Our sample shows that about three quarters were males (72.9%). Majority of the respondents in the study were less than 34 years old. Specifically, out of the total 218 respondents, 11.5% of the respondents were under the age 25 years, while 34.9% were within the age category of 25-34 years, 31.7% were within the age category of 35-44 years, and 18.8% were in the age category of 45-54 years. Only 3.2% of the respondents were more than 55 years old. Over half of the respondents (65.1%) are married. Regarding their academic qualification, more than half of the respondents were holding a Bachelor's degree (59.6%) and 32.6% of the respondents have a Master's degree. In terms of the respondents' position, 53.2% were working as engineers while 46.8% were positioned as senior engineers. Respondents were also questioned about their job and organizational tenure. In terms of their job tenure, 14.2% of the respondents had been working in their position from 7 months to 1 year, while 32.1% of the respondents indicated that they have worked in their current position for 1-3 years. Meanwhile, 33.9% of the respondents have worked 4 to 6 years in their current position. 18.8% of the respondents indicated that they have worked at their current position from 7 to 9 years while only a minority of the respondents (0.9 %) indicated that they have worked at their current position from 10 to 15 years. Regarding their organizational tenure, 14.7% of the respondents in this study have been working from 7 months to 1 year in the organization. Moreover, 17.4% of the respondents have 1 to 3 years of working experience, while the majority of the respondents (33.5%) have been working in the organization from 4 to 6 years. In addition, 23.9% of the respondents have 7 to 9 years of experience, while 7.8% of the respondents indicated that they have been working in the organization from 10 to 15 years. Only 2.8% of the respondents indicated that they have been working in the organization for more than 15 years.

3.2 Measures and Control Variables

The independent variable in this study comprised of 16 items relating to Emotional Intelligence (e.g. "Most of the time, I have a good sense of why I have certain feelings) was adopted from Wong and Law (2002) with the reliability of 0.89 for SEA, 0.88 for UOE, 0.76 for ROE, and 0.85 for OEA. Respondents responded to the items using a 7-point Likert-type scale with "1" = "*strongly disagree*" to "7" = "*strongly agree"*. On the other hand, Innovative Work Behavior, 9 items were adopted from Janssen (2000) (e.g. As an engineer in this organization, I create new ideas for difficult issues). The respondents will give their agreement based on seven-point Likert scale ranging from "1" (never) to "7" (always). The reliability reported by Janssen (2000)was 0.95.

Since previous studies have demonstrated that demographic variables (such as age, gender, academic qualification, marital status, job tenure, organization tenure) were correlated with IWB (Janssen 2004, Pieterse, van Knippenberg et al. 2010, Zhou, Zhang et al. 2011, Aryee, Walumbwa et al. 2012), therefore, these five demographic variables were statistically estimated to avoid overestimating the effect of the exogenous variables on the endogenous variables.

3.3 Analytical Strategy

The hypotheses were tested using Smart Partial Least Squares (SmartPLS) software developed by Ringle, Wende et al. (2005). According to Henseler, Ringle et al. (2009), PLS model can be evaluated and interpreted in two stages using: (1) the measurement model, and (2) the structural model. The measurement model examines the relationships between the manifest variables (observed items) and latent variables. The measurement model is also examined in terms of its reliability (item reliability and internal consistency) and validity (convergent validity and discriminant validity).

Prior to the assessment of the structural model, this research conceptualized EI as a second-order formative construct. In addition, given that, results of confirmatory factor analyses in previous studies indicated a good fit for a second order model with the four dimensions loading on an underlying EI latent factor (Wong and Law 2002, Law, Wong et al. 2004). Hence, this study has combined the four dimensions into a single EI measure since this study is interested in the overall EI construct, rather than the individual dimensions. The second order model of EI is also in harmony with previous studies (Wong and Law 2002, Ashkanasy and Dasborough 2003, Law, Wong et al. 2004, Sy, Tram et al. 2006, Kafetsios and Zampetakis 2008).

On the other hand, the structural model specifies the relationships between the latent variables through "bootstrapping". The structural model is evaluated based on the significance of the path coefficients and R^2 measures.

4.0 Results

4.1 Measurement Model Results

To test the reliability and validity of the measurement model, the loadings for each item and the composite reliabilities were examined. Item reliability specifies the correlations of the items with their respective construct which is indicated by the item's loading (Chin 1998). Chin (1998) suggests a minimum loading of 0.7. To access the individual item reliability, the loading of each item was examined. Table 1 shows the items loading ranging from 0. 737 to 0.976. It is worth to mention here that all items for the constructs are reflective items as can be seen in Figure2. As shown in Table 1 below, all the study constructs have satisfied the criterion of internal consistency with composite reliability (CR) higher than 0.7 as suggested by Fornell and Larcker (1981).

Table 1

Summary of Composite Reliability and the Average Variance Extract for the Measurement Model

Construct	Items	Loading	AVE	CR
Others' Emotional Appraisal	OEA1	0.882	0.763	0.928
	OEA2	0.873		
	OEA3	0.893		
	OEA4	0.845		
Regulation of Emotion	ROE1	0.833	0.767	0.929
	ROE2	0.893		
	ROE3	0.899		
	ROE4	0.876		
Self-Emotion Appraisal	SEA1	0.942	0.915	0.977
	SEA2	0.958		
	SEA3	0.967		
	SEA4	0.960		
Use of Emotion	UOE1	0.868	0.704	0.905
	UOE2	0.870		
	UOE3	0.839		
	UOE4	0.777		
Innovative Work Behavior	IWB1	0.945	0.906	0.989
	IWB2	0.947		
	IWB3	0.976		
	IWB4	0.966		
	IWB5	0.975		
	IWB6	0.956		
	IWB7	0.970		
	IWB8	0.953		
	IWB9	0.872		

We subsequently examined the validity of the measurement model based on its convergent validity and discriminant validity. Convergent validity reflects whether a particular items measures a latent variable which it is supposed to measure (Urbach and Ahlemann 2010). Fornell and Larcker (1981) proposed that the average variance extracted (AVE) is used as the criterion to measure convergent validity of a measurement model. According to Fornell and Larcker (1981), an AVE value greater than 0.50 indicates that, on average, a latent variable is able to explain more than half of the variance of its indicators. As shown in Table 1, the AVE values (ranging from 0.704 to 0.915) surpassed the 0.50 cut-off proposed by Fornell and Larcker's (1981). Hence, it can be surmised that the measurement model possesses convergent validity. Meanwhile, discriminant validity focuses on the degree in which the item of a latent variable differs from one another. Henseler et al. (2009) suggested the use of both Fornell and Larcker's (1981) criterion and Chin's (1998) cross-loading criterion in determining discriminant validity. From Table 2, it can be seen that the square root of the average variance extracted (AVE) of the latent variable exceeded the correlations of other constructs which fulfil Fornell and Larcker's (1981) criterion. According to Chin (1998), items indicated sufficient convergent and discriminant validity if the loading of each indicator is greater than all of its cross-loadings. We inspected through the loadings of each indicator and found that the respected loading was greater than all of its cross-loadings. This indicates the presence of discriminant and convergent validity of the measurement model. Based on the estimated parameters, it can be concluded that the measurement model is reliable and valid.

Table 2
Discriminant Validity of Constructs

Item	IWB	OEA	ROE	SEA	UOE
IWB	**0.952**				
OEA	0.438	**0.873**			
ROE	0.527	0.688	**0.876**		
SEA	0.806	0.513	0.622	**0.957**	
UOE	0.481	0.438	0.512	0.599	**0.839**

Notes: The value in the diagonal is the square root of AVE while the others entries represent the squared correlations
OEA – Others' Emotion Appraisal *SEA – Self- Emotion Appraisal*
ROE – Regulation of Emotion *UOE – Use of Emotion*
IWB – Innovative Work Behavior

4.2 Emotional Intelligence as a Second Order Construct

As suggested by Becker, Klein et al. (2012), two-stage approaches were adopted to model higher-order constructs. In the first step, estimation of the first order constructs EI was conducted and followed by saving the latent variable scores. In the second step, the obtained latent variable scores were used as formative indicators. These two-second order constructs became first order formative constructs. In order to assess formative measures, few statistical criteria need to be assessed, and they are:

1. The significance of their weights and the items
2. Multicollinearity, indicator variance inflation factor (VIF) value should be less than 10 (Kleinbaum, Kupper et al. 1998)
3. Correlation between the items to the construct.

The result of this study showed that all weights for EI measures were significant (except for items UOE and ROE). Moreover, this criterion alone is not sufficient to determine the goodness of items as the VIF needed to be assessed. Results show that VIF values were below the commonly used threshold of 10 (Kleinbaum, Kupper et al. 1998, Diamantopoulos 2011) which indicates that multicollinearity is relatively low and does not pose any issue in this study. Table 3 shows the results EI weights and VIF after transforming into a second order construct. Concerning the third criterion, the correlation between the items to a latent variable score reveals that all items for both constructs are significantly correlated.

Table 3
Weights and VIF values for TL and EI as Second Order Construct

Construct	Scale	Items	Weights	VIF
Emotional Intelligence (EI)	Formative	OEA	0.187	1.955
		ROE	0.087	2.375
		SEA	0.820	1.988
		UOE	0.013	1.646

Notes:
OEA – Others' Emotion Appraisal *SEA – Self- Emotion Appraisal*
ROE – Regulation of Emotion *UOE – Use of Emotion*

4.3 Structural Model Results

Prior to performing the path analysis, the effect of the control variables on exogenous variables was estimated. As portrayed in Table 4, even though academic qualification variable was found to have significant effects on the endogenous variable. According to Cohen (1988), R^2 change value of 0.004 was considered as trivial, hence, it would not affect the estimation of the variance explained by the exogenous variable.

Table 4
Assessment of Control Variable Effect on Endogenous Variables

Control Variables	Endogenous Variable IWB		
	Beta	***t-values***	**R^2 Change**
Gender	-0.008	0.207	0.000
Age	0.004	0.117	0.000
Academic Qualification	-0.033	1.035	0.004
Job Tenure	0.022	0.643	0.000
Org Tenure	0.027	0.778	0.000

Note: **significant at p<0.01, *significant at p<0.05, bootstrapping (n=5000)

After estimating the effects of the control variables, algorithms were executed to examine the relationships between the exogenous variables and the endogenous variable. Figure 2 presents the beta coefficients between

exogenous variables and endogenous variable.

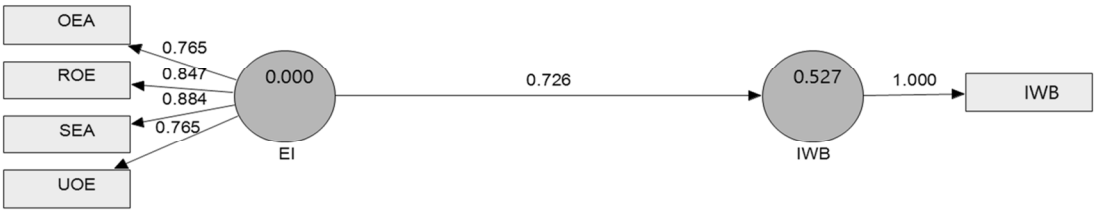

Figure 2 Path Coefficient and R^2 in the Research Model

Table 5, presents the details of the path coefficients, standard errors, *t*-values and decisions for hypotheses that relates to the relationship between EI and IWB. As shown in Table 5, EI has a positive and significant relationship with IWB ($\beta = 0.726$, $p < 0.05$) thereby, H1 is supported.

Table 5

Path Coefficient and Hypothesis Testing for Direct Effects

Hypotheses	Relationship	Beta	Std. Error	*t*-Value	Decision
1	EI → IWB	0.726*	0.031	23.342	Supported

*Notes: ** p < 0.01 (2.333), * p < 0.05 (1.645)*

EI – Emotional Intelligence IWB – Innovative Work Behavior

We also examined the variance explained by the exogenous latent variables in the measurement model. According to Chin (1998), R^2 value ranges from zero to one. In fact, based on Cohen (1988) interpretation, R^2 value of 0.26, 0.13, and 0.02 for endogenous latent variables are considered as substantial, moderate, and weak respectively. Table 6 presents the R^2 values in the present study. As shown in Table 6, EI explained 52.7% of the variance in IWB. Accordingly, it can be seen that the exogenous variable in the present study were able to substantially explain the variance in the endogenous variable. Overall, based on Cohen's (1988) cut-off values, it can be concluded that the measurement model was able to explain a rather substantial amount (52.7%) of variance in IWB.

Table 6

R^2 Values in the Model

Endogenous Variable	R^2
Innovative Work Behavior (IWB)	0.527

5.0 Discussion

This paper aims to investigate the predictors of IWB among telecommunication engineers in the telecommunication organizations in Jordan. Specifically, this paper examines the relationship between EI and IWB. Results showed that EI has a positive and significant relationships with IWB. This finding implies that engineers with high level of EI have high IWB.

The findings are in line with previous scholars (e.g. Schutte, Schuettpelz et al. 2001, Abubakr and Al-Shaikh 2007, Dincer, Gencer et al. 2011), who found that those with greater EI skills are more inclined to perform positive work behavior that goes beyond expectation. Furthermore, they are more capable of understanding their emotion, have the ability to utilize their emotions to the benefit of the work, and understand their co-worker's emotions, which all in all is EI abilities. Additionally, employees who possess EI abilities are more focused, have clear of mind, positive, and high in self-efficacy (Cherniss and Goleman 2001, Wong and Law 2002).

Likewise, Wong and Law (2002) claimed that individual with a high level of EI have a better relationship with their colleagues. Thus, engineers with greater EI ability are more likely to show positive emotions, build greater relationship with their colleagues. The positive emotions and strong relationship among colleagues would subsequently promote the greater possibility of collaboration and feedback. With the collaboration and feedback, it cultivates the exhibition of IWB. Based on the results of current study, the previous findings seemed to be applicable within the context of telecommunication organizations in Jordan.

6. Implications and Recommendations for Managerial Practice

Several implications have emerged from our study's findings. Results show that there is a direct effect between EI and IWB. The result implies that engineers with high level of EI tend to have a high level of IWB. Specifically, this study found that engineers, who have the ability to appraise other's emotion, use and regulate their own emotions, and understand other emotions are more likely to engage in work and exhibit IWB. With this realization, management should find ways to improve the EI level of their engineers. First, it is suggested managers to assess the EI level of candidates during the stage of recruiting new engineers. For instance,

information from the candidate's resume, job experience and academic qualifications, may provide some clues on the level of EI of the candidate. Previous jobs may have provided some forms of EI training or might have developed some EI skill. In addition to the information on resume, managers can conduct behavioral interviews to ascertain whether candidates are high in EI. Good insights can be gained by giving candidates specific examples of real situations in the workplace and probing their responses. Conducting EI training is another option (Dulewicz and Higgs 2004, Lee and Ok 2012). Through EI training, engineers can enhance their skills in identifying problems and finding different solutions for any issue that might occur (Ramachandran, Jordan et al. 2011).

7. Limitations and Future Research Suggestions

Findings in present study demonstrated the significant relationship between EI and IWB. Thus, future researchers may want to replicate the study in other different organizations to confirm the results. In addition, this study only examines EI as an IWB determinant. Future studies might want to expand on the current study to other individual related variables such as work engagement (Aryee, Walumbwa et al. 2012), and innovation orientation (Siguaw, Simpson et al. 2006).

As with all research, several limitations have been identified in this study. First, our study was cross-sectional in nature, which limits causal inferences. One suggestion to address this problem would be to carry out a longitudinal study. Second, our data was gathered via self-reports which may be subjected to common method variance issues. Future researchers may opt to collect data from multiple sources (such as from the supervisors as well as peers) to address this shortcoming. This study was conducted among telecommunications engineers working in Jordanian telecommunication organizations. The cultural differences among countries prevent the study findings from being generalized to other countries (Hofstede 2005). Therefore, it is worthwhile to replicate this study in other developing Asian countries to cross-validate the findings from this study.

Additionally, the data in this study was collected from telecommunication engineers, hence; it is beneficial for future studies to expand the study to research and development (R&D) employees. R&D employees are considered an important strength for organizations as they help organizations to own a high technological capability and to absorb the knowledge developed outside the organizations (Fontana, Geuna et al. 2006). These efforts may greatly improve the generalizability of the findings.

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