

Employees' Service Innovation Behavior and New Service Development in Four- and Five-Star Hotels

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Abstract

This study aims to explore the impact of Employee Service Innovation Behavior (ESIB) on New Service Development (NSD) among hotels' employees. A research model was proposed in which one hypothesis was developed. The empirical data were collected from employees who are working in four- and five-star hotels in Jordan. A total of 332 questionnaires were returned and the data were analyzed using a single regression to determine the relationship between ESIB and NSD. The results supported the proposed model that there is a significant relationship between ESIB and NSD, and it also found that service innovation performance is exited in the hotel industry. The theoretical and managerial implications were drawn based on the study findings, and recommendations for future researchers were made, and limitations and conclusions are discussed.

Keywords

Employee service innovation behavior, New service development, Hotels.

Introduction

It is necessary to differentiate creativity from innovation. Creativity means the development of potential new and useful ideas, and employees may share these ideas with others, it is considered as the initial phase of the innovation process. Innovation refers to the successful implementation of new and useful ideas at organizational level (Amabile, 1996, 1997). Creativity is defined as "the production of novel and useful ideas in any domain," whereas innovation is defined as "the successful implementation of creative ideas within an organization." Innovation means the successful implementing of the generated ideas or products at the organizational level (Oldham and Cummings, 1996). Specifically, creativity seems to be the seed of all innovation (Amabile et al., 1996: p. 1155). Another argument suggested that creativity is an important input into the substitute-generation stage of the innovation process (Ford, 1996). Furthermore, creativity is treated as part of the organizational climate or culture, and this climate or culture could enhance innovation and performance (Swann and Birke, 2005). The promotion of employee creativity and the generation of new ideas are considered the key factors, which are necessary to implement innovation (Montes et al., 2003). High levels of employee productivity and creativity are required for developing new services and products and continuously improving internal processes (Forbes and Domm, 2004).

However, creativity and innovation concepts are frequently employed interchangeably in the literature (Scott and Bruce, 1994; Awamleh, 1994; Martins and Terblanche, 2003; Mostafa, 2005). For example, Mostafa (2005: p.8) introduced one definition for creativity or innovation as a "systematic development and practical application of a new idea." Hence, creativity and innovation are very much linked in individuals' minds as one term and they use these terms interchangeably. Some arguments state that creativity and innovation are fundamentally the same phenomenon, but they take place at various levels of analysis (Ford, 1996). For example, creativity

is the initial phase to the process of innovation, while innovation refers to the successful implementation of new and useful ideas. Therefore, innovation is an important process for the long-standing success of an organization (Amabile, 1997). As a result, the concepts of creativity and innovation are commonly phrased together because they are linked to each other even though there are some differences in their meanings, like creativity being the production of ideas, while innovation refers to the application of the produced ideas (Coveney, 2008).

Other researchers (i.e., West, 2002; Rank et al., 2004; Flaatin, 2007) confirmed that creativity is considered as one stage of innovation, and that innovation consists of two stages: The idea generation stage and the idea implementation stage. Specifically, creativity refers to the generation of ideas, whereas innovation implies the transformation of ideas into new products or services. That means innovation is the implementation of creativity results, and creativity is considered as a part of the innovation process (Alves et al., 2007). Consequently, creativity is a desirable outcome, which provides many benefits to organizations through transferring ideas to employees for their own use and serving as a fundamental dimension for organizational innovations (Shalley et al., 2004).

Literature Review

Innovation is a necessary requirement for organizational effectiveness (Basadur et al., 2002), and for seeking for new solutions to product problems, as well as new and better solutions to business and customer problems (Herbig and Jacobs, 1996; Mostafa, 2005). Successful organizations are more dependent on creativity and innovation than ever (Wong and Pang, 2003a). Service Innovation Performance (SIP) represents two dimensions, namely Employee Service Innovation Behavior (ESIB), and New Service Development (NSD). More specifically, SIP emerged in service organizations to explore individual innovative behavior. Innovation is defined as a multistage process, and creativity or generation of the ideas

is only one stage of innovation which is the first stage, the second stage seeking sponsorship and supporters for an idea, and the last stage producing a model of innovation. Each stage requires different individual innovative behavior and different activities, and, therefore, individual innovative behavior is a critical part in innovation (Scott and Bruce, 1994). NSD is important for service organizations as a competitive advantage that enables these organizations to achieve superior performance and to respond to changing customer requirements and competitive threats. Even the importance of NSD, but the research in that area still very limited (Matear et al., 2004).

The concept of creativity is different from innovation. Specifically, creativity and innovation are fundamentally the same phenomenon, but they take place at various levels of analysis and, therefore, each concept has a different definition (Amabile et al., 1996). Hence, creativity is the initial phase of the innovation process, while innovation is the successful implementation of new and useful ideas (Amabile, 1997). Consequently, innovation is composed of two stages: Idea generation and idea implementation. Creativity refers to idea generation, whereas innovation implies idea transformation into new products or services (West, 2002; Rank et al., 2004; Flaatin, 2007). Similarly, innovation is the implementation process of creativity results and that supports creativity as a part of the innovation (Alves et al., 2007).

In the turbulent hospitality industry, innovation has become a strategic weapon for successful hospitality organizations. Innovations in hospitality are mostly intangible assets. Clearly, service innovations in the hospitality industry have a wide range starting from complete innovations that produce new services to new markets, to slight modifications of the present services through simple adapting of existing services (i.e., change keys to swipe cards), or offering added value to services through providing extra novel facilities (i.e., serviced apartments) (Ottenbacher and Gnoth, 2005).

The hospitality industry faces the challenges of a turbulent and unstable environment that has forced hospitality organizations to modify and update their services to meet the change in their customers' needs and wants, and survive in the market. As a result, the implementation of innovation becomes an important technique for successful hospitality organizations. In the 21st century, creativity is considered as a vital factor in the development process in hospitality (Wong and Pang, 2003b). However, there is little published research about innovation in the hospitality industry despite the importance of innovation in that industry (Ottenbacher, 2007). The shortage of creativity research in the hospitality industry refers to the notion that creativity is generally related to the artistic industries such as poetry, music composing, fiction writing, drama, painting, filmmaking, and so on. The main concern in the hospitality industry was, historically, providing food, and accommodation to travellers, therefore the hospitality concentrated on the routine work in hotels to meet and satisfy travellers' needs for both accommodation and food (Wong and Ladkin, 2008).

Individuals with different cultures and backgrounds can produce variations in the need for creativity, and therefore, diverse

environmental motivators could be used to motivate individuals to be creative people. Thus, it is vital to determine the stimulants to creativity in the working environment and how hospitality organizations can enhance their individuals' creativity and so survive in the global competitive environment (Wong and Pang, 2003a). Independent studies have confirmed that creativity is considered to be a consistent and significant predictor of peak performance at different levels of employment within the hospitality industry (Houran and Ference, 2006).

Innovation has many benefits, but the major benefit of successful innovation in the hospitality industry is the competitive advantage that has been achieved by organizations (Ottenbacher and Gnoth, 2005). Innovation in the hospitality industry can be rapidly imitated, therefore, continuous innovation becomes a vital element to reinforce imitation barriers to the competitive market (Harrington, 2004). Successful innovations are not always clear for managers in the hospitality industry. Creating an organizational culture that encourages creativity, are vital intangible features of organizations, as well as innovative thinking, and these stands out in innovation management (Ottenbacher and Harrington, 2007). The tangible forms of organizational creative outcomes in the hotel industry such as: Improved customer services, product innovations, and continuous improvement (Wong and Pang, 2003b). Hence, hotels need to become innovative in service, processes, and procedures through developing delivery of service to customers, especially with the increasing competitiveness of the market, and need to concentrate on the quality of products and distinction in service.

The hospitality industry has plenty of options for determining which products and services will add value to customers. Hotels need to evaluate the value that will be added to service to customers before introducing a new innovation for a service or product (Victorino et al., 2005). The difference in levels of hotel quality does not really have an impact on hotel operations, but the difference between high and low-quality hotels is the quality of the extra services and tangibles. Thus, innovation is considered as a key lever to develop and upgrade operations at hotels (Wong and Ladkin, 2008). In the service industry, both "novel" and "useful" are essential characteristics for identifying a creative idea (Madjar and Ortiz-Walters, 2008).

Despite the importance of creativity and innovation in the hospitality industry, few studies have been conducted to investigate creativity or innovation in that industry. For example, Ottenbacher and Gnoth (2005) indicated that innovation was less important than commitment to the service, empowerment, employee training, and the effectiveness of human resources management in German hotels. They indicated that tangible features of service innovation were associated with successful innovations in the hospitality industry. Similarly, another study was conducted by Orfila-Sintes et al. (2005) to identify innovation activity in hotels in Spain. The results found that the higher category hotels (i.e., 3-, 4- and 5-star) have more innovation than the lower category hotels (i.e., 1- and 2-star). As a result, hotels with 3-star or more have the capacity to differentiate their products and services, while, the 1- and 2-star hotels showed the lowest rate of innovation since these hotels tend to adopt a "follow-up behavior" that allows them

to survive in the market. In addition, highly technological innovation was present in chain hotels and hotels under a management contract. Human capital skills and abilities showed an important role in successful innovation. The study also found that innovation activity was positively related to performance as evidenced by the generation of more rents at innovative hotels. However, the literature showed a shortage of empirical studies in organizational creativity in the hospitality sector, although a few studies investigated creativity, employee creativity or innovation rather than organizational creativity. Therefore, there is a need to investigate organizational creativity in the hospitality industry.

Despite the absence of empirical studies in the relationship between creativity and innovation, Heunks (1998) supported the view that creativity was related to innovation in 200 organizations from six countries in European Union. He revealed that creativity had a significant positive relationship with product innovation in old organizations (over 32 years old), but creativity may also foster process innovation. Creativity tended to have some specific personal backgrounds: Risk-taking, challenges and entrepreneurship, whereas innovation had other aspects: Risk-taking, education, self-confidence, future orientation, leadership, external capital, and information. Consequently, risk-taking is the only personal background that is common to both creativity and innovation. More comprehensive results are presented by Prajogo et al. (2004), who argued that creativity and idea generation had a significant and positive relationship with both product innovation and process innovation in manufacturing and non-manufacturing organizations based on managerial perspectives, but had a stronger relationship with product innovation than with process innovation. The study also found that process and product innovation are strongly related to each other. As a result, organizations need to develop creativity in order to promote process and product innovation.

Some scholars (i.e., Forbes and Domm, 2004; Montes et al., 2003) claimed that high levels of employee creativity was necessary for implementing innovation, developing new services/products and continuously improving internal processes. Swann and Birke (2005) showed that creativity is considered to be a part of the organizational climate or culture that could enhance innovation. Several empirical evidences were provided by other studies that confirmed the relationship between creativity and innovation in general rather than SIP in particular. For example, Amabile (1988) argued that employee creativity-relevant skills significantly impact on innovation within organizations. Amabile (1997) confirmed the role of creativity to creating innovation. Furthermore, Miron et al. (2004) argued that creativity positively affected innovation at the implementation stage, thus creativity had a significant positive relationship with innovation.

Bharadwaj and Menon (2000) investigated the impact of creativity mechanisms on innovation within a large number of manufacturing and service organizations in the US. They revealed that the presence of both individual and organizational creativity mechanisms led to the highest level of innovation. The study suggested that a high level of organizational creativity mechanisms with a low level of individual creativity mechanisms led to significantly superior innovation performance than low levels of both individual and organizational

creativity mechanisms. They provided empirical evidence that organizational efforts at creativity had a positive impact on innovation. Forbes and Domm (2004) claimed that high levels of employee productivity are required for developing new services and products and continuously improving internal processes. While, Hu et al. (2009) found that ESIB was significantly and positively related to NSD.

Research Methodology

The current study aims to explore the relationship between ESIB and NSD in the hotel industry. In order to fill the gap in the literature, the present study suggests a proposed model as shown in Figure 1.

In the study model, the hypothesis was developed to test the relationship among the variables, and Figure 1 displays the following hypothesis:

H1: ESIB is positively related to NSD.

Variables' measurements

Innovation instrument is comprised of two parts. The first part will explore employees' perceptions of SIP (i.e. ESIB, NSD) at their hotel, this part contained 14 statements to investigate innovative environment in order to measure SIP. All items in this scale were adapted from Hu et al.'s (2009) instrument using a six-point Likert scale ranging from 1 "Strongly Disagree" to 6 "Strongly Agree," which describe two dimensions:

1. ESIB contained six statements (Sip1, Sip 3, Sip 5, Sip 7, Sip 10, Sip 13).
2. NSD contained eight statements (Sip 2, Sip 4, Sip 6, Sip 8, Sip 9, Sip 11, Sip 12, Sip 14).

Finally, the second part contained 10 statements about demographic profiles (gender, age, nationality, social status, and education), hotel name, experience, organizational position, department and monthly salary, which were developed by the researcher.

Sample

The target population contains all employees who work at Jordanian resort hotels around the Dead Sea, Gulf of Aqaba and in Petra, since all Jordanian resort hotels are located in these locations. A purposive sampling was used to obtain only four- and five-star resort hotels, which have appropriate characteristics that meet the purpose of this study (Zikmund, 2003). Around 22 four- and five-star resort hotels are considered as destination resort hotels in Jordan were selected to participate in this study, which had a total number of 4,179 employees in 2011 (Jordanian Ministry of Tourism, 2011). The sampling frame in this study contained all line employees. The researcher will approach the subjects in this sampling frame through a contact

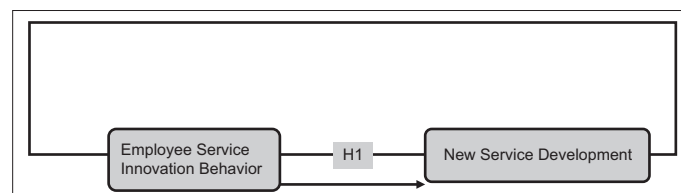


Figure 1: A proposed model of the study. Source: The Researcher

with their Human Resource (HR) managers. Furthermore, a random sampling technique will be selected to choose the study participants in order to obtain a representative sample for population (Sekaran, 2003), and to ensure that selecting the sample will be at random from sampling frame (Saunders et al., 2009).

Data collection

The study scales were adapted from the western context based on English versions, while the study context used the Arabic language. Hence, it was necessary to conduct two pilot tests, one on the English version and another on the Arabic version. The first pilot study was conducted in English version with people speaking and understanding English language very well, 10 employees working in five-star resort hotels in Jordan were asked to complete the study’s questionnaire. The majority of respondents completed the questionnaire without any confusion or need for more clarification. Based on the respondents’ evaluations, the researcher modified and developed the statements of the questionnaire in order to be understandable and applicable in the hotel industry.

On the other hand, since Arabic is the mother language of the people in Jordan, and due to the fact that not all employees in the resort hotels could understand the English version, the questionnaire was translated from English into Arabic by the first qualified person who is speaking English fluently, after that questionnaire was translated back from Arabic to English by another fluently bilingual person, and then examined to assess the appropriateness of the translation. This translation was conducted in order to identify and modify inconsistency between English and Arabic versions (Zikmund, 2003). The second pilot study was conducted by administrating the questionnaire after the completion of translation and back-translation from English to Arabic, to 10 employees working in five-star resort hotels in Jordan, who agreed to complete the questionnaire in Arabic version. Thus, 10 questionnaires were distributed to employees. The respondents found few misleading words and unclear statements, and they suggested modifications to some statements. Then, the researcher changed misleading words and modified some statements regarding respondents’ feedback in order to avoid ambiguous statements and misunderstanding those statements.

The research population is made up of all employees in 17 four- and five-star resort hotels in Jordan. This research used a cross-sectional approach to collect data. Thus, data were collected via a self-administrated questionnaire. More clarification, 630 questionnaires were distributed to all employees. A total of 346 questionnaires were returned, a response rate of 53.9%. However, as 14 questionnaires were invalid due to incomplete data, the researcher obtained 332 usable questionnaires. The quantitative data were analyzed by using Statistical Package for the Social Sciences (SPSS) 21.0 for windows.

Results

Characteristics of the participating hotels

This study provides a brief description of the participated hotels characteristics such as hotel classification, hotel affiliation and hotel management as shown in Table 1.

Demographic characteristics of employee sample

The current study provides a brief description of the demographic

Table 1: Characteristics of the participating hotels (N=17)

Characteristic	Number of hotels	Percentage
Hotel classification		
Five-star	12	71
Four-star	5	29
Hotel affiliation		
International chain	11	65
Independent hotels	6	35
Hotel management		
Management contract	14	82
Managed by owners	3	18

Table 2: Demographic characteristics of employee sample (N=332)

Characteristic	Percentage
Gender	
Male	83
Female	17
Age	
25 years or less	25.3
26-35	59
36-45	13.9
46-55	1.5
56 years or more	0.3
Nationality	
Jordanian	96
Non-Jordanian	4
Social status	
Single	52.4
Married	21.3
Divorced	2.7
Widow (er)	1.2
Education level	
Less than secondary education	14.2
Secondary school graduates	31.9
Undergraduate degree	51.8
Postgraduate degree	2.1
Department	
Front office and housekeeping	30.7
Food and beverage	40.7
Finance & sales and marketing	13.6
Personnel and training	6.3
Engineering and maintenance	3.9
Other departments	4.8
Experience	
Less than 1 year	18
Between 2 and 4 years	44.9
Between 5 and 7 years	29.8
More than 8 years	7.3
Monthly salary	
Less than JD 300	45.2
Between JD 300 and 449	39.8
Between JD 450 and 600	10.2
More than JD 600	4.8

characteristics of the participated employees such as gender, age, nationality, social status, education level, participants' departments and experiences, and monthly salary as shown in Table 2.

A total number of employees participated in this study was 332. Most participants (83%) were males since Arabic culture restricts females to work in resort hotels. The majority of participants (84.7%) age 35 years or less that represents most employees were young people. However, most of the participants (96%) were Jordanian, and more than (52.4%) were single. However, (51.8%) of employees were undergraduate degree holders that indicate most employees were educated people. Most participants (40.7%) are working in Food and Beverage Department as the main department in the hotel. The highest number of participants (44.9%) was 2-4 years of service since some unskilled jobs in resorts need inexperienced people. Most participants (45.2%) had monthly salary less than JD 300.

Scales purification

This study adapted existing western scales, which showed good reliability and validity results through different contexts in previous researches. However, it was necessary to purify these scales due to this study was conducted in Jordan as a non-western country. Factor analysis carried out through two ways: Exploratory to discover the set of variables underlie the common factors of measurement scales, and confirmatory to confirm the structure of measurement scales.

Exploratory factor analysis (EFA)

EFA was conducted in order to reduce the number of items in each scale due to poor loadings or cross-loadings, as well to establish the factors underlying each construct in the innovation survey. An assumption analysis was necessary to check the suitability and factorability of obtained data for EFA and construct validity. Table 3 shows the results of factor analysis assumptions for creativity instrument based on three criteria as suggested by Hair et al. (2010), which are: Correlation matrix ($r = 0.30$ or greater), Kaiser-Meyer-Olkin (KMO) (0.60 or above), and Bartlett's Test of Sphericity (significant at $p < 0.05$).

As can be seen from Table 3, a correlation matrix revealed that all constructs have many correlation coefficients with a value of 0.30 and above, KMO value ranging between 0.862 and 0.910, which are above the 0.60 recommended cut-off point, and Bartlett's Test of Sphericity reached statistical significance for all variables ($p = 0.000$). These results confirmed the construct validity for all scales of creativity instrument, and therefore using factor analysis was acceptable.

Based on the previous results, the 14 items of the innovation questionnaire representing two constructs of SIP were subjected to EFA. Principle Components Analysis using SPSS version 18 was performed for each scale separately, all items in scales were used in EFA before eliminating any item for maximizing reliability. A factor loading of 0.40 was used as the cut-off point in this study.

ESIB

ESIB was represented by six items in the original scale. Factor analysis was conducted using varimax rotation to test the underlying structure of ESIB as shown in Table 4.

Table 3: Factor analysis assumptions for creativity instrument

Assumption	SIP	
	ESIB	NSD
Correlation matrix	>0.30	>0.30
KMO	0.862	0.910
Bartlett's Test of Sphericity	0.000	0.000

ESIB: Employee service innovation behavior, NSD: New service development, SIP: Service innovation performance, KMO: Kaiser-Meyer-Olkin

As can be seen from Table 4, one extracted factor obtained Eigenvalue was highly greater than 1, with a high percentage of variance 60.431%. ESIB items showed very high factor loadings were ranged from 0.699 to 0.835. Consequently, the factor analysis confirmed that the items in ESIB scale formed a single factor.

NSD

Table 5 shows the results of EFA for eight items of NSD scale representing one initial dimension.

Table 5 shows, one extracted factor obtained Eigenvalue greater than 1, with a percentage of variance was 64.530%. NSD items had high factor loadings exceeding 0.40 ranged from 0.759 to 0.837. These results confirmed one-dimensional structure of NSD.

Confirmatory factor analysis (CFA)

CFA aims to test hypotheses based on previous studies or on relevant theory. Factor loadings for the variables are hypothesized, and then proceeds to fit these loading in the target matrix (Kline, 1994). CFA was conducted to confirm the underlying structures of each construct. The goodness of fit tests assess by different fit indices, are: Normed Chi-Square (χ^2/df); p of Close Fit (PCLOSE); Tucker Lewis Index (TLI); Normed Fit Index (NFI); the Comparative Fit Index (CFI); the Incremental Fit Index (IFI); and the root mean square error of approximation (RMSEA) (Joreskog, 1993; Kline, 2005).

ESIB

The six observed items of ESIB scale were initially subjected to CFA as specified by EFA. The initial results of ESIB model revealed that χ^2/df and RMSEA had high values and greater than the recommended values. As a result, this model was not accepted and, therefore, the second run was necessary to improve the model fit. The results of second run after deleting two items (Sip7, Sip10) from ESIB scale. However, the results showed that CFI, IFI, NFI and TLI greater than the recommended 0.90, RMSEA and χ^2/df had high values but still within the acceptable level, and PCLOSE value was 0.082 which is greater than 0.05. As a result, the modified ESIB model had the good fit.

NSD

The NSD scale was subjected to CFA, the initial results of NSD model revealed that χ^2/df , RMSEA had high values and greater than the acceptable values, as well TLI, PCLOSE had values less than the recommended values. Therefore, four items (Sip2, Sip6, Sip8, Sip11) were deleted from NSD scale to obtain an

Table 4: Results of EFA (ESIB)

Scale	No. of items	Item	Item loading component	No. of factors	Eigenvalue	% of variance	Cumulative %
ESIB	6	Sip1	0.743	1	3.626	60.431	60.431
		Sip3	0.833				
		Sip5	0.835				
		Sip7	0.699				
		Sip10	0.760				
		Sip13	0.785	0.785			

EFA: Exploratory factor analysis, ESIB: Employee service innovation behavior

Table 5: Results of EFA (NSD)

Scale	No. of items	Item	Item loading component	No. of factors	Eigenvalue	% of variance	Cumulative %
NSD	8	Sip2	0.788	1	5.162	64.530	64.530
		Sip4	0.811				
		Sip6	0.816				
		Sip8	0.837				
		Sip9	0.788				
		Sip11	0.820				
		Sip12	0.805				
		Sip14	0.759				

EFA: Exploratory factor analysis, NSD: New service development

acceptable model. The results of second run found that all fit measures had excellent values, specifically, the values of CFI, IFI, NFI, and TLI were one or close to one and greater than the recommended 0.90, RMSEA value was 0.020, PCLOSE value was 0.574, and finally, χ^2/df was 1.132. Consequently, the good fit for NSD model was confirmed.

Reliability and validity of the creativity instrument

The research instrument has to be valid and reliable for data collection, and therefore, it was necessary to examine reliability and validity for each scale in the innovation instrument. Innovation instrument made up one part. Innovation service performance was developed consisted of two scales (i.e., ESIB, NSD). These scales were evaluated for reliability and validity, and some items were eliminated to maximize scale reliability.

Reliability test

Reliability refers to the extent to which measurement scales provide a consistent result. This study used Cronbach's alpha as a reliability coefficient. The acceptable value of Cronbach's alpha should be above 0.70 as suggested by Nunnally (1978) or at least above 0.60 as recommended by DeVellis (1991). An internal consistency analysis was conducted using the SPSS program for each scale, and overall scores of scales. Following, are the reliability results of each scale used in the innovation instrument.

ESIB

Table 6 revealed the reliability results of ESIB scale, which includes four items.

Table 6 pointed out that ESIB scale had an acceptable alpha reliability coefficient ($\alpha = 0.849$), with inter-item correlation greater than 0.50. This scale is therefore accepted as a measure of ESIB.

NSD scale

The internal consistency of NSD was estimated using the Cronbach's alpha as shown in Table 7.

As can be seen from Table 7, NSD scale had an acceptable alpha reliability coefficient ($\alpha = 0.841$), and inter-item correlation ranged from 0.611 to 0.753. Therefore, there was no need to drop any item from the scales of creativity instrument to improve its reliability. As a result, creativity instrument had an acceptable internal consistency because Cronbach's alpha scores were above the recommended 0.60 level, and therefore, the reliability for creativity instrument was good and acceptable for this work. Accordingly, the study scales were judged to be reliable.

Validity of scales

The scales of innovation instrument had content validity due to the study used valid and reliable scales were all derived from an extensive review of the literature and have being used previously, as well detailed evaluations by academicians and practicing managers, for instance, innovation instrument has been piloted two times by experts of practitioners and academics as discussed earlier to ensure content validity.

Construct validity was confirmed for each scale separately by using assumptions of factor analysis to ensure the suitability of gathered data for factor analysis. The results indicated that all constructs have many correlation coefficients with a value greater than 0.30, KMO value ranging between 0.862 and 0.91, which are above the recommended value 0.60, and Bartlett's Test of Sphericity values for all constructs were significant at the level $p = 0.000$. These results confirmed that all scales of the innovation instrument had construct validity.

Another type of validity, criterion-related validity, was conducted for innovation instrument separately. Furthermore,

Table 6: ESIB scale reliability

Item	No. of items	Cronbach's alpha	Item-total correlation
ESIB	4	0.849	
Sip1: At work, I seek new service techniques and methods			0.678
Sip3: At work, I sometimes come up with innovative and creative ideas			0.764
Sip5: At work, I sometimes propose my creative ideas and try to convince others			0.710
Sip13: Overall, I consider myself a creative member of my team			0.606

ESIB: Employee service innovation behavior

Table 7: NSD scale reliability

Item	No. of items	Cronbach's alpha	Item-total correlation
NSD	4	0.841	
Sip4: All departments and units in this hotel interact well to develop new business			0.611
Sip9: Our team is professional in developing new services or new products			0.674
Sip12: The new services developed by our team are effective with respect to timing, resources and process			0.753
Sip14: The hotel's current manpower is sufficient for the new services that have to be developed			0.667

NSD: New service development

criterion-related validity for innovation instrument was a measure of how well scale of ESIB is related to measures of NSD (the criteria). Bivariate correlation (Pearson) analysis was conducted for testing criterion validity by investigating the interrelationships between the independent and dependent variable sets: ESIB (predictor set) and NSD (the criterion set). The bivariate correlation coefficients are listed in Table 8.

As can be seen from Table 8, the correlation within innovation scales (criterion set), between the predictor set and criterion set were significant at the level $p = 0.000$. As a result, this confirmed that innovation instrument had criterion-related validity. Based on the above results, the scales of innovation instrument had the three types of validity: Content validity, criterion-related validity, and construct validity. Consequently, the scales in this instrument are valid and reliable for the further analyses.

Distribution of the study dimensions in creativity instrument

After confirming the reliability and validity of the instrument scales, descriptive analysis was conducted for extracted dimensions and overall scales. Due to this study used different scales, and therefore, each scale has a different midpoint. Table 9 shows descriptive statistics, including, mean, standard deviation (SD), Skewness and Kurtosis.

Innovation instrument was used to measure three main scales, these scales were measured based on employees' perceptions. Two scales, ESIB, and NSD, were used to measure SIP. More specifically, the results revealed that employees perceived themselves as being highly oriented in their behavior toward service innovation (mean = 4.45, SD = 1.03). Finally, employees felt they could provide NSD (mean = 4.33, SD = 1.07).

On the other hand, the distribution of collected data is supposed to be normal for statistical analysis. Two statistical measures,

Table 8: Bivariate correlation matrices

Scale	Mean	SD	ESIB	NSD
ESIB	4.45	1.03	1.000	
NSD	4.33	1.07	0.721**	1.000

**Correlation is significant at the 0.01 level (2-tailed), N=332. SD: Standard deviation, NSD: New service development, ESIB: Employee service innovation behavior

Skewness and Kurtosis, can be used to measure the normality of variables. Table 9 found that all variables in the innovation instrument are normally distributed. The values of Skewness and Kurtosis ranged between -0.808 and 0.629 fell within a range of acceptable values, which are -1.0 to +1.0. These results confirmed the normality of data, and therefore, the data are ready for further statistical analyses.

Correlation analysis

A correlation analysis will be used in this study to test the relationship between independent and dependent(s). A correlation coefficient was conducted among innovation behavior and NSD. The results as shown in Table 8 indicated significant correlations were between ESIB and NSD, were ($r = 0.721$).

Testing the hypotheses

The current study tested the hypothesis by using a linear regression analysis. The results of correlation analysis revealed that there were very high significant correlations between all variables of this study, since the significant level was $p < 0.05$. Hence, a linear regression model was necessary to conduct in order to indicate the impact of ESIB on NSD as dependent variables.

H1: ESIB is positively related to NSD.

In this study, ESIB as one dimension of service innovation was proposed to have a positive relationship with the second one (NSD). This hypothesis was tested by a linear regression analysis, and the results are presented in Table 10.

The regression results showed that ESIB is a good significant predictor of NSD as shown in Table 10, ESIB is positively related to NSD ($\beta = 0.721, p < 0.01$). More specifically, ESIB explains (R^2) 52% of the variance in NSD. However, the overall statistical results indicated that ESIB positively influenced NSD. Accordingly, hypothesis 1 is accepted which confirmed the positive relationship between ESIB and NSD.

Discussion

SIP was measured by using Hu et al.'s (2009) scale which was developed from previous scales (i.e., Scott and Brue, 1994; Matear et al., 2004) for measuring SIP in the hotel industry. More specifically, the SIP scale consisted of two main scales: The ESIB scale (6 items) which was originally developed by Scott and Brue (1994) as "individual innovative behavior" scale using a five-point Likert-type scale ranging from 1 "Not at all" to 5 "To an exceptional degree" at a research and development (R&D) center in the US; and the NSD scale (8 items) which was originally developed by Matear et al. (2004) using a five-point Likert scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree" at service organizations in New Zealand.

Contrary to previous studies, Hu et al. (2009) developed SIP, ESIB, and NSD scales, in higher-class hotels in a non-western context, Taiwan, and they used a six-point Likert scale ranging from 1 "Strongly Disagree" to 6 "Strongly Agree." From this, they confirmed that the SIP scale is a reliable and valid instrument for measuring SIP, more specifically in the hotel industry.

ESIB was measured by six items representing one initial dimension using a six-point scale ranging from 1 "Strongly Disagree" to 6 "Strongly Agree." The results of EFA in the current study confirmed that the items of ESIB clearly formed a single factor, as these items showed high item loadings, which ranged from 0.699 to 0.835. Based on the above results, the unidimensionality of the ESIB scale was supported in this study. Moreover, the results of first run of CFA revealed that the ESIB model was not accepted, and therefore two items (Sip7, Sip10) were dropped from the ESIB scale. The results of the second run of CFA indicated that fit indices CFI, IFI, NFI, and TLI had

values greater than the recommended 0.90, PCLOSE = 0.082, whereas RMSEA and χ^2/df had high values were 0.10, 4.319 respectively, falling within the range of the acceptable values. These results confirmed that the ESIB model had a good fit. Furthermore, the ESIB scale had an acceptable reliability shown by Cronbach's alpha being 0.849 and there was no need to drop any item to maximize the reliability of the scale, and inter-item correlations for the items ranged from 0.606 to 0.764. The ESIB scale had content validity and construct validity. This scale is therefore accepted as a measure of ESIB.

Scott and Bruce (1994) confirmed the validity and reliability of the innovative behavior scale, including six items, as Cronbach's alpha coefficient was ($\alpha = 0.89$). These results were supported by Hu et al. (2009) who found that all items of ESIB were loaded strongly into one factor with a range of 0.65-0.83, and also that ESIB had a high Cronbach's alpha coefficient ($\alpha = 0.92$) indicating a reliable and valid instrument to measure ESIB in the hotel industry. Chen et al. (2010) confirmed that Scott and Bruce's scale is a reliable scale; they found that the innovative behavior scale had a high Cronbach's alpha coefficient 0.88. Similar results were obtained by Vinarski-Peretz et al. (2011), who indicated a Cronbach's alpha for this scale of $\alpha = 0.92$.

The mean score for ESIB in this study was measured and found to be 4.45. This indicated that employees in the sampled hotels had ESIB. These results were supported by Scott and Bruce's (1994) findings by using a five-point scale; they found that R&D professionals rated their ESIB moderately (mean = 3.20). In the hotel industry, Hu et al. (2009) found that employees at higher-class hotels in Taiwan showed ESIB evidenced by the mean score of ESIB being 4.18.

NSD was measured by eight items representing one initial dimension using a six-point scale ranging from 1 "Strongly Disagree" to 6 "Strongly Agree." In this study, the results of EFA for items of the NSD scale indicated that all items were loaded on one factor, and therefore NSD was confirmed as a one-dimensional scale with high item loadings ranging from 0.759 to 0.837. The results of the first run of CFA revealed that the NSD model required some improvement due to the values of some fit indices being less than the recommended values, and therefore four items (Sip2, Sip6, Sip8, Sip11) were deleted from the NSD scale. On the other hand, the results of the second run confirmed an excellent fit for the NSD model, with fit measures CFI, IFI,

Table 9: Distribution of the dimensions of the creativity instrument

Scale	Scale	Extracted dimensions	Mean	SD	Skewness*	Kurtosis*	No. of items
Service innovation	1-6	ESIB	4.45	1.03	-0.808	0.629	4
		NSD	4.33	1.07	-0.615	0.095	4

*The cut point between -1 and 1. SD: Standard deviation, NSD: New service development, ESIB: Employee service innovation behavior

Table 10: Linear regression for impact of ESIB on NSD

Independent variable	Dependent variable: NSD					
	R	R ²	F	β	t	Sig.
ESIB	0.721	0.520	357.594	0.721	18.910**	0.000

NSD: New service development, ESIB: Employee service innovation behavior, **Correlation is significant at the 0.01 level (2-tailed)

NFI, and TLI having excellent values which were greater than the recommended 0.90, and other fit indices RMSEA = 0.020, PCLOSE = 0.574, $\chi^2/df = 1.132$ fell perfectly within the range of acceptable values. This study confirmed that the NSD scale is a reliable scale since it had Cronbach's alpha of $\alpha = 0.841$, and there was no need to drop any item to improve the scale's reliability. For all items, the item-total correlations ranged from 0.611 to 0.753. Validity was confirmed for the NSD scale in terms of content validity and construct validity. Thus, the NSD scale was confirmed as a valid and reliable scale.

Matear et al. (2004) used 17 items that were derived from previous studies to measure "NSD" representing four dimensions, namely: People, process, organizational support and implementation. They confirmed through EFA that NSD was measured by two dimensions, organizational support and implementation, and each dimension had four items. Cronbach's alpha coefficient for NSD was $\alpha = 0.764$. Furthermore, Hu et al. (2009) confirmed the unidimensionality of the NSD scale due to all items being loaded strongly into one factor with a range of 0.63-0.90, and they also confirmed the reliability of the NSD scale since it had a high Cronbach's alpha coefficient ($\alpha = 0.94$). As a result, the NSD scale was a reliable and valid instrument to measure NSD in the hotel industry.

In this study, the mean score for NSD was measured and was found to be 4.33. This indicated that the sampled hotels had NSD. These results were consistent with Hu et al.'s (2009) findings, suggesting that employees at higher-class hotels in Taiwan rated NSD moderately as the mean score of NSD was 4.03. The findings of this study were consistent with most scholars (e.g., Amabile, 1988; Heunks, 1998; Bharadwaj and Menon, 2000; Montes et al., 2003; Prajogo et al., 2004; Forbes and Domm, 2004; Miron et al., 2004; Swann and Birke, 2005) who argued that organizational creativity had a significant and positive relationship with innovation. Those scholars claimed that creativity was necessary for implementing innovation, and developing new service. As a result, organizations need to develop creativity in order to promote innovation. The current study confirmed Hu et al.'s (2009) findings; they found that ESIB was significantly and positively related to NSD.

Conclusions

In developing countries like Jordan, there is a shortage of creativity studies in general, and particularly in the hospitality industry. This study attempts to fill that gap by identifying the impact of organizational creativity on SIP at Jordanian resort hotels. Specifically, individuals with different cultures and backgrounds show some differences about the need for creativity at work. Therefore, organizational creativity can vary based on individuals' achievements because each individual has a different level of creativity. Creativity can vary from a slight change at work to total change, whereas innovation refers to the successful implementation of creativity.

As a result, organizational creativity can impact SIP at hotels. The researcher concluded that organizational creativity in hotels had a positive impact on both ESIB and NSD. This study also determined the relationship between ESIB and NSD in the hotel industry.

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