

 <http://dx.doi.org/10.20878/cshr.2017.23.6.007>

The Impact of the Hotel Employees' Psychological Safety and Intrinsic Motivation on Creative Process Engagement

Ji-Eun Kim and Mi-Kyung Kim[†]

Dept. of Hotel & Tourism Management, Daegu Catholic University, Korea

KEYWORDS

Psychological safety,
Intrinsic motivation,
Problem identification,
Information searching &
coding,
Idea generation,
Creative process
engagement.

ABSTRACT

In this quantitative research, it was enhanced to understand the impact of intrinsic motivation on creative process engagement by examining the significant role of psychological safety on intrinsic motivation. These relationships were examined by targeting the employees working full-time for five star deluxe hotels. Total number of 230 responses had been collected out of 250 cases requested and the number of 213 cases was used for the final analysis. The data were analyzed using structural equation modeling with SPSS 19.0 and AMOS 7 software program. The results suggested that psychological safety is significantly associated with intrinsic motivation. Furthermore, the hotel employees' problem identification, information searching & coding, and idea generation are affected by intrinsic motivation. That is, intrinsic motivation plays a significant role for each sub-factors of creative process engagement in the hotel industry. The theoretical and practical implications of these findings are established and related suggestion for formulating marketing strategy is well discussed.

1. INTRODUCTION

In knowledge-based hotel economy, hotel organizations face rising needs to increase not only productivity among their employees, but also their creative involvement. Creative involvement in the workplace is issued as a critical variable in the current industrial situation since human productive performance has been increasingly replaced by the artificial intelligence. This means the hotel industry needs to define and describe the personnel's roles using new management paradigm. For example, the speed of technical development as well as globalization of hotel and increasing competition have oppressed hotel organizations to be first-to-market, quick to solve problems, and leading novel ideas for service

and products. Therefore, enhancing creative process engagement, "the production of novel and useful ideas by an individual or small group of individuals working together" (Amabile, 1988), has rapidly become a key goal of many organizations (Mumford, Scott, Gaddis, & Strange, 2002). This poses a hotel management's challenge to seek ways to foster and maintain creativity at work.

Enhancing the employees' creative process engagement can be divided into personal factors and contextual factors (Oldham & Cummings, 1996). The contextual factors are quite effective to bring about their creative process engagement, however, temporary and limited while the personal factors tend to be consistent, stable, and continuous.

Therefore, this study intends to examine the personal fac-

[†] Corresponding author: Mi-Kyung Kim, Dept. of Hotel and Tourism Management, Daegu Catholic University, 13-13 Hayang-ro, Hayangeup, Kyungsan 38430, South Korea, Tel. +82-53-850-3137, Fax. +82-53-850-3426, E-mail: mkagnes@cu.ac.kr

tors to influence the hotel employees' creative process engagement so as to investigate consistent and long-term antecedents in the hotel industry.

A key research question in this study is what activates consistently the hotel employees' passion to engage in creative processes. Employees may express their ideas and opinions to advance the hotel organizations and therefore exhibit creative process engagement (Dyne, Ang, & Botero, 2003). However, they hesitate to generate their ideas because they feel unsafe about upsetting their leaders (Gao, Janssen, & Shi, 2011). In other words, employees need to feel safe in order to be engaged in creative processes. Psychological safety is interrelated with employees' motivation to make voices. Activation of human behaviors can be explained by motivation commonly divided into extrinsic and intrinsic motivation. Specifically, psychological activation causes intrinsic motivation and this has been noticed by the researchers because of the strong impact on voluntary involvement in work (Mgedezi, Toga, & Mjoli, 2014). This study, therefore, adopts intrinsic motivation to investigate the relationship with the hotel employees' creative process engagement.

In an attempt to address the study needs to investigate the effective motivation to explain creative process engagement in the hotel industry, this study firstly aims to examine whether the hotel employees' psychological safety makes a significant impact on their intrinsic motivation. Secondly, this study investigates whether their intrinsic motivation significantly influence each sub-factor of creative process engagement. Finally, it will be discussed how to drive the hotel organization to creative movement.

2. LITERATURE REVIEW

2.1. Psychological Safety

Psychological safety is defined as "an employee's sense of being able to show and employ one's self without fear of negative consequences to self-image, status or career" (Kahn, 1990). Specifically, psychological safety in work environment means a shared trust of a team's safety regardless of taking interpersonal risks (Edmondson, 1999). In psychologically safe condition, an individual does not have a fear of expressing their opinions to improve their organizations.

This study considers psychological safety as a personal factor. In psychologically safe organizational atmosphere, employees don't hesitate to take personal risks because they feel

safe from punishment for making mistakes. Therefore, in order to make the employees feel psychologically safe, safe work environment needs to be provided (Milliken, Morrison, & Hewlin, 2003). Then the organizations can expect their generation of novel ideas.

A psychological safety in an organization takes place when shared beliefs of safety in interpersonal relationship and supportive management exist regardless of speaking out any ideas related to organizational improvement (Hernandez, Luthanen, Ramsel, & Osatuke, 2015).

Psychological safety has been noticed by researchers because it enhances an interpersonal work environment (Hirak, Peng, Carmeli, & Schaubroeck, 2012). Specifically, it plays a key role to increase work engagement (May, Gilson, & Harter, 2004). More recently, Ugurlu and Ayas (2016) describes the significance of psychological safety for employees' prosocial voice and suggests a significant relationship between the two variables mediated through affective commitment.

In summary, psychological safety as a personal factor is effective to increase creative work involvement. Personal level of psychological safety is also enhanced by the organizational support and environment.

2.2. Work Motivation and Intrinsic Motivation

Work motivation is defined as "a set of energetic forces that originates both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration" (Pinder, 1998). Work motivation has been considered influential to organizational effectiveness (Ahn, 2010). The outcomes from work motivation appear through the employees' attention, effort, and persistence, job satisfaction, and performance (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). Most research presented the significant impact of personal factors in work motivation and these factors include self-report measures of personality, affect, interests, and values (Kanfer, Chen, & Pritchard, 2008).

Deci and Ryan (2000) explained the nature of motivation through self determination theory (SDT). The mechanism of human behavior is explained by the assumption that "human beings are active, growth-oriented organisms who are naturally inclined toward integration of their psychic elements into a unified sense of self and integration of themselves into larger social structures" (Deci & Ryan, 2000). From the perspective of work motivation, although psychological propensity influences individual behaviors, organizational support

and climate may influence their motivation level (Deci & Ryan, 2002).

Commonly motivation is explained by intrinsic motivation (i.e., activities occur for its own sake because one considers the activity itself interesting, valued, pleasurable) and extrinsic motivation (i.e., activities occur because of material causes like compensation). SDT encompasses intrinsic motivation referring to one's attention to the work itself because of his or her pleasure and satisfaction through accomplishment. Intrinsic motivation has been drawn to be the most influential for organizational performance like individuals' involvement in and commitment to their work as well as loyalty to the organization (Tremblay et al., 2009). Extrinsic motivation has been also proved to enhance the individuals' performance levels, however, expectation of evaluation increase work anxiety and weaken creative performance (Amabile, 1985).

In summary, work motivation drives an individual to be committed to his or her job and perform well. It is noticeable that employees get motivated to act through self-determined reasons as well as external rewards. However, intrinsic motivation is chosen to be the antecedent of creative process engagement in this study because it seems to be personal and consistent indicator.

2.3. Creative Process Engagement

Creative process engagement, defined as employees' involvement in creativity-related process, includes (1) problem identification, (2) information searching and encoding, and (3) idea and alternative generation (Reiter-Palmon & Illies, 2004). Employee actively engaged in this process may exhibit novel ideas and outcomes and job engagement results in work performance (Kwon & Lim, 2016).

Amabile (1983) also suggested that creative process engagement brought about creative behaviors. In other words, the individuals engaged in creative process are more likely to express their ideas than those who are not. Further, to establish creative organization, an individual needs to engage in creative process like problem identification (Shalley, 1991), knowledge application to decision making (Bahrami & Evans, 1987).

Creative process engagement "determine the flexibility with which cognitive pathways are explored, the attention given to particular aspects of the task, and the extent to which a particular pathway is followed in pursuit of a solution"

(Amabile, 1996). Specifically, when an employee is committed to creative process, he or she tends to spend time to think about an idea or a solution to some problems persistently (Spreitzer, 1995). In addition, such an employee is willing to take risks, build one's own cognitive method, and pleased about creative process (Amabile, Conti, Coon, Lazenby, & Herron, 1996).

More recently, Phoocharoon (2014) depicted that well designed organizational mechanisms as well as an individual's personal motivational propensity towards creative activities enhance creative process engagement so that the individuals suggest novel ideas and alternative opinions for organizational improvement.

In summary, creative process engagement is needed in the organization so as to build a creative organizational strength and the antecedents to enhance creative process engagement is organizational support and an individual propensity towards creative activity.

2.4. The Relationship between Psychological Safety and Intrinsic Motivation

It has been presented that psychological safety plays an significant role on intrinsic motivation in the present study. Reflecting on the literature, intrinsic motivation refers to motivational movement of which employees are pleased about work itself, regardless of any external rewards (Utman, 1997).

Kang, Park, and Kim (2011) suggests that psychological empowerment by which the employees can feel meaningful in their work makes an impact on their intrinsic motivation. Avolio, Gardner, Walumbwa, Luthans, and May (2004) also prove the strength of psychological empowerment on the employees' commitment to their work. As a consequence, when the employees have safe consideration on their tasks, they enjoy their works and pay attention to them more. In addition, psychologically safe employees have autonomy and discretion on their works so that they are likely to have high level of intrinsic motivation.

More recently, Choi and Chang (2014)'s study result indicates that employees are intrinsically motivated when they feel psychologically safe in making decisions and suggesting new ideas.

It is expected that employees possessing psychological safety are likely to be intrinsically motivated. This would result in fostering the employees' attention to their works and mak-

ing better performances. As follows, the relationship between psychological safety and intrinsic motivation in the hotel industry is hypothesized.

- H1: The hotel employees' psychological safety makes a significantly positive impact on their intrinsic motivation.

2.5. The Relationship between Intrinsic Motivation and Creative Process Engagement

Intrinsic motivation is originated from a "positive reaction to qualities of the task itself" (Amabile, 1996). Intrinsic motivational orientation has been proved to be influential factor in creativity by many researchers (Amabile, 1990; Barron & Harrington, 1981). The relationship between intrinsic motivation and creative process engagement has been examined as follows.

The individuals intrinsically motivated tend to focus on the work itself and result in high creativity and productivity (Karatepe & Tekinkus, 2006).

More recently, Yang and Kim (2011) empirically proved the significant impact of intrinsic motivation on individual creativity. Choi and Chang (2014) verified the significance of the organizational members' intrinsic motivation to improve their creativity. Further, according to Zhang and Gheibi (2015), the employees' passion to challenge difficult tasks and team creativity is enhanced when the level of intrinsic motivation is high. For example, employees are aware of organizational problems and may try to find out effective solutions or better ways to manage their organization.

In addition, Crow (2015) depicted that intrinsically motivated individuals look for information to solve some problems and fulfill their thirst for knowledge by themselves because they have curiosity, passion, and affection for it.

According to Tierney, Farmer, and Graen (1999), the individuals are able to generate creative ideas the most when they are intrinsically motivated. It is assumed that intrinsic motivation is the most autonomous and self-determined aspect driven by interest and joy for work itself so that it may influence one's creative activity to bring about a sense of accomplishment. Further, Ugurlu and Ayas (2016)'s study indicates that employees' intrinsic motivation makes them speak out their ideas. This means the employees are likely to make novel ideas on the basis of their knowledge and experiences when they are intrinsically motivated. In addition, Jeon

and Kwon (2017) depicted the significance of intrinsic motivation to foster creativity of cooks.

Based on the existing literature, it is assumed that the hotel employees' intrinsic motivation is likely to influence each sub-factor of creative process engagement. This study withdraws the following hypotheses picturing the relationship between intrinsic motivation and each sub-factor of creative work engagement in the hotel industry.

- H2: The hotel employees' intrinsic motivation makes a significantly positive impact on their creative process engagement.

- H2-1: The hotel employees' intrinsic motivation makes a significantly positive impact on their problem identification.

- H2-2: The hotel employees' intrinsic motivation makes a significantly positive impact on their information searching and coding.

- H2-3: The hotel employees' intrinsic motivation makes a significantly positive impact on their idea generation.

3. METHODOLOGY

3.1. Settlement of Proposed Model

As illustrated in Fig. 1, based on the propositions developed from the literature review, a conceptual model is proposed to explain the relationship among psychological safety, intrinsic motivation, and creative process engagement with sub-factors including problem identification, information searching and coding, and idea generation.

3.2. Instruments

3.2.1. Psychological Safety

Psychological safety defined as a trust in an assurance of relationship in the organization regardless of any suggestions for organizational improvement. The measure of psychological safety contained seven items developed by Edmondson (1999). A sample item is "When someone in our company makes a mistake, it is often held against them" (reversed coded). Respondents were asked to rate the statement on a 5-point Likert scale (not at all to extremely) by comparing themselves over the past two weeks with their 'usual selves'.

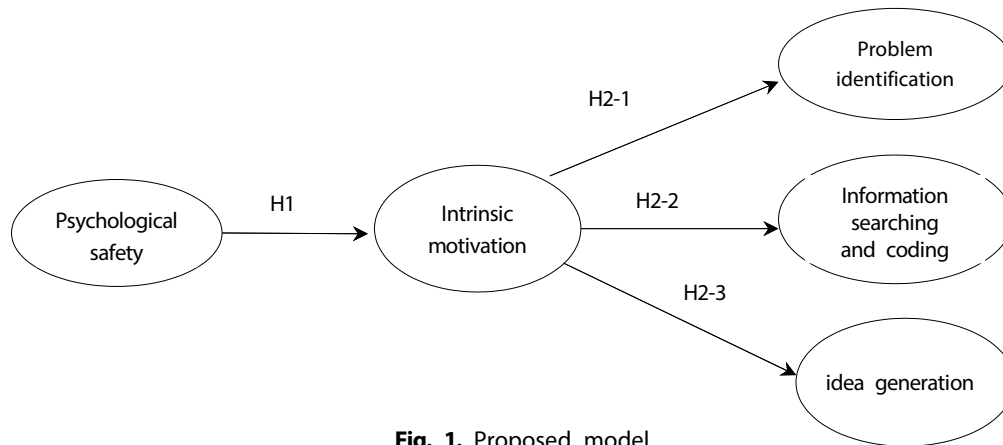


Fig. 1. Proposed model.

3.2.2. Intrinsic Motivation

Intrinsic motivation is defined as an employee's affection for their work itself and willingness to look for better ideas for their organizations. This study employed the scales of intrinsic motivation from Amabile (1985), Tierney et al. (1999). This measurement consisting of three questions asks the hotel employees to which extent they enjoy finding solutions to complex problems, creating new procedures for work tasks, and improving existing processes or products. Respondents were asked to rate the statement on a 5-point Likert scale (not at all to extremely) by comparing themselves over the past two weeks with their 'usual selves'.

3.2.3. Creative Process Engagement

Creative process engagement means to which extent the employees are involved in creative processes. The hotel employees' creative process engagement was measured using an 11-item scale developed by Perry-Smith (2006), and Reiter-Palmon and Illies (2004). The items consist of three sub-categories such as problem identification, information searching & coding, and idea generation. Five-point Likert scale was used to rate the statement (1 indicating "not at all" to 5 indicating "extremely") by comparing themselves over the past two weeks with their 'usual selves'.

3.2.4. Data Collection and Sampling Frame

This study targets the five-star deluxe hotel employees. Preliminary study was conducted sampling fifty respondents currently working for JW Marriot in Seoul. This had been conducted from March 1st to 15th in 2017 and showed a reasonable fit. At the same time, the respondents were asked to see

whether there were any unclear items in the survey because each item was translated from English to Korean and some items might not fit Korean language.

Main survey was conducted using convenience sampling and this includes JW Marriot, Millenuim Hilton, Grand Hyatt in Seoul, Paradise in Incheon, and the Shilla in Jeju. The main survey has been done using mail survey to each hotel from May 10th to Jun 10th in 2017 after permitted by each business outlet's managers acquainted with the researcher. The study objective and survey method have been explained to the managers prior to the survey. Then, they were asked to survey fifty cases of subordinates and/or superiors with more than one year experience and full time position if possible.

The survey described that each response was confidential and it was conducted after the respondents' consents. If they didn't like to continue the survey, they were willingly allowed to quit answering. This was carried out to fulfill the study ethics of human rights. For example, the mail survey asks them whether they consent this survey. If not, they can avoid the survey at the beginning or in the middle of the survey. Total number of 230 responses had been collected out of 250 cases requested. Further, after the cases with missing values were subsequently dropped from the data, the number of 213 cases has been analyzed.

3.2.5. Data Analysis

SPSS 19.0 and AMOS 7 software program was used to analyse the data. These programs was utilized to conduct descriptive statistics, multi-variate analysis of variance, and structural equation modeling (SEM). Frequency analysis and reliability analysis were operated. Furthermore, in order to understand different relationship between variables, the correlation analy-

sis was conducted. To verify the hypotheses and model of the study, confirmatory factor analysis was used to examine conformity of the causal relationship among each factor and covariance structure analysis was used to investigate a path coefficient.

4. RESULTS

4.1. Demographic Information

Out of the 213 respondents, the result shows that 47.4% of them are males (101 persons) and 52.6% of them are females (112 persons) as shown in Table 1. The majority of the respondents (20~29:30.0%, 30~39:34.7%) are in the age groups of 20~39. Moreover, the majority of the respondents (85.9%) have a degree between junior college and university. Also, 89 people (41.8%) have 1~3 year (s) of work experience, 99 people (56.5%) have 4~9 years, and 32 people (11.7%) have over 10 years experiences in the hotel industry. Most of the respondents such as 156 persons (73.2%) are full time employees. At the same time, their current department are distributed to room division (44.1%), back office (15.0%), food and beverage (21.6%), catering (18.8%); clerk (40.4%), caption (25.8 %), manager (20.2%), director or higher (13.6%).

4.2. Results of Validity and Reliability

As the survey items are adapted from different streams of studies, it is important to ensure construct reliability and validity. Cronbach's coefficient alpha was used to determine reliability of the measurement.

As indicated in Table 2, Cronbach's α of each construct in measurement model is ranged from 0.704 to 0.896 significantly a scale with high level of reliability; this value is adequate at Cronbach's $\alpha \geq 0.60$ (Lee, 2006).

If construct reliability reaches above 0.7, convergent validity or internal consistency is secured (Kim, 2007). Also, convergent validity is procured as long as AVE reaches above 0.5 (Kim, 2007). In terms of construct reliability, the values of five constructs are ranged from 0.820 to 0.925. As illustrated in Table 2, standardized factor loading of all measures were moderate (ranging from 0.535 to 0.877). These present that relevant measurement items explained the designated underlying construct well because it fulfills cutoff of above 0.5, explaining construct validity (Kim, 2007). Further, each average variance extracted (AVE) reaches between 0.603 to 0.698.

Discriminant validity was established using the procedures outlined by Fornell & Larcker (1981). Table 3 shows the correlations between the latent variables and Table 2 presents the

Table 1. Result of the demographic analysis of the respondents

Respondent characteristics	Items	Frequencies (percentages)	Respondent characteristics	Items	Frequencies (percentages)
Gender	Male	101 (47.4)	Employment status	Full time	156 (73.2)
	Female	112 (52.6)		Temporary contract	57 (26.8)
Age	20~29	64 (30.0)	Department	Room division	94 (44.1)
	30~39	74 (34.7)		Back office	32 (15.0)
	40~49	62 (29.1)		F&B	46 (21.6)
	50 or more	13 (6.1)		Catering	41 (18.8)
Education	Junior collage	51 (23.9)		Clerk	86 (40.4)
	University	130 (61.0)	Current position	Caption (supervisor)	55 (25.8)
	Master or more	23 (10.8)		Manager	43 (20.2)
	Others	9 (4.3)		Director or higher	29 (13.6)
Work Experience in hotel	1~3 years	89 (41.8)			
	4~6 years	68 (31.9)			
	7~9 years	31 (14.6)			
	Over 10 years	25 (11.7)			
The total		213 (100)	The total		213 (100)

Table 2. Confirmatory factor analysis and discriminant validity

Factor	Item	Estimate	S.C.	t-value	p-value	Cronbach's α	CCR	AVE
Psychological safety	If someone in our hotel make a mistake in this organization, it is often held again them (R).	1.000	0.679					
	Members of this hotel are able to bring up problems and tough issues.	1.061	0.762	12.015	***			
	People in this hotel sometimes reject others for being different (R).	1.285	0.877	11.194	***			
	It is safe to take a risk.	1.118	0.770	10.058	***	0.896	0.925	0.644
	It is difficult to talk other members for help (R).	1.168	0.750	9.831	***			
	No one in this hotel would deliberately act in a way that undermines my efforts.	1.248	0.802	10.414	***			
	Working with other members, my unique skills, and talents are valued and utilized.	0.780	0.535	7.222	***			
Intrinsic motivation	I enjoy finding solutions to complex problems.	1.000	0.636					
	I enjoy creating new procedures for work tasks.	1.082	0.785	8.700	***	0.756	0.873	0.698
	I enjoy improving existing processes or products.	1.001	0.758	8.536	***			
Problem identification	I spend considerable time trying to understand the nature of the problem.	1.000	0.626					
	I think about the problem from multiple perspectives.	1.139	0.803	8.788	***	0.751	0.849	0.666
	I decompose a difficult problem/assignment into parts to obtain greater understanding.	1.056	0.726	8.280	***			
Information searching & encoding	I consult a wide variety of information.	1.000	0.625					
	I search for information from multiple sources (e.g., personal memories, others' experience, documentation, Internet, etc.).	1.087	0.724	8.003	***	0.704	0.820	0.604
	I retain large amounts of detailed information in my area of expertise for future use.	1.013	0.659	7.506	***			
Idea generation	I consider diverse sources of information in generating new ideas.	1.000	0.696					
	I look for connections with solutions used in seeming diverse areas.	0.890	0.638	8.211	***			
	I generate a significant number of alternatives to the same problem before I choose the final solution.	0.965	0.641	8.251	***	0.794	0.884	0.603
	I try to devise potential solutions that move away from established ways of doing things.	0.930	0.654	8.395	***			
	I spend considerable time shifting through information that helps to generate new ideas.	0.961	0.664	8.534	***			
χ^2 (df: 176)=345.506, $p=0.000$, Fit Index: CMIN/df=1.963, GFI=0.905, AGFI=0.821, RMR=0.030, NFI=0.850, CFI=0.919, TLI=0.904, RMSEA=0.067, ***: 0.000, (R): negatively worded item.								

average variance extracted (AVE) of each construct. Fornell and Larcker (1981) prescribe that the squared correlation between constructs must be less than the AVE of each underlying

construct in order for the constructs to have discriminant validity. As suggested in Table 2 and Table 3, each AVE is ranged from 0.603 to 0.698 while squared correlations are

Table 3. Correlation matrix between the constructs

Variables	Means	SD	Inter-construct correlations ^a				
			1	2	3	4	5
Psychological Safety	3.382	0.656	1				
Intrin. M.	3.396	0.568	0.446** (0.199)	1			
Pro. I.	3.376	0.599	0.385** (0.148)	0.597** (0.356)	1		
Searc.& En.	3.568	0.581	0.379** (0.144)	0.542** (0.297)	0.602** (0.362)	1	
Idea G.	3.444	0.527	0.365* (0.133)	0.577** (0.333)	0.635** (0.403)	0.629** (0.396)	1

** Significant at $p < 0.01$; (two-way) Two standard-error interval estimate of correlation does not include value 1; () squared correlations.

ranged from 0.133 to 0.403. These outcomes established discriminant validity. As a result, these values represent all six constructs, and it is significant to analyze the relationship between those constructs.

4.3. Results of Confirmatory Factor Analysis

The confirmatory measurement model was used to examine the construct validity of the measurement in this study. Confirmatory factor analysis (CFA) procedures can confirm whether the scales of psychometric properties are reasonable fit to extend beyond exploratory analytic technique (Noar, 2003). Further, CFA can add further information about dimensionality of scale by testing a variety of models against one another (Noar, 2003). The confirmatory factor analysis was completed with maximum likelihood estimation in this study.

CFA was applied to all the items and chi-square of 345.506, degree of freedom of 176, and p -value of 0.000 ($p < 0.001$). Further, the value in chi-square/df should be less than three to secure overall goodness of fit (Kim, 2007). The value of chi-square/df shows 1.963 so that overall goodness of fit is secured.

In assessing model fit, the following indices should be fulfilled: GFI (Goodness-of-fit index: desirable at ≥ 0.90), AGFI (Adjusted Goodness of fit Index: desirable at ≥ 0.90), RMR (Root Mean Square Residual: desirable at ≤ 0.05), NFI (Normed fit index: desirable at ≥ 0.90), CFI (Comparative fit index: desirable at ≥ 0.90), χ^2 (chi-square: desirable at > 0.05), TLI (Tucker-Lewis Index: desirable at ≥ 0.90), RMSEA (Root Mean Square Error of Approximation: very desirable at ≤ 0.05 or moderately desirable at < 0.08).

As presented in Table 2, NFI (0.850), and AGFI (0.821) indicate unfulfilled indices, however, RMR (0.030), GFI (0.905), CFI (0.919), TLI (0.904), and RMSEA (0.067) indicate the reasonable fit of the data. The relatively small sample sizes limit the possibility of reaching the 0.9 cutoff value for some fit indices and they are not dependable as "a stand alone index" (Hooper, Coughlan, & Mullen, 2008). Further, an acceptable model could be rejected if researchers strictly adhere to suggested cutoff values according to Marsh, Haw, and Wen (2004). Specifically, NFI and AGFI are influenced by small sample. Therefore, the relationship among the latent variables can be presumed to be a reasonable fit.

Table 4. Parameter estimate in structural model

Hypotheses	Path	S.C.	S.E.	t-value	p-value	Result
H1	Psychological safety \rightarrow Intrinsic motivation	0.520	0.071	5.759	***	Supported
H2-1	Intrinsic motivation \rightarrow Problem identification	0.889	0.132	7.012	***	Supported
H2-2	Intrinsic motivation \rightarrow Searching & encoding	0.877	0.127	6.842	***	Supported
H2-3	Intrinsic motivation \rightarrow Idea generation	0.886	0.122	7.595	***	Supported

χ^2 (df:181)=349.748, $p=0.000$, Fit Index: CMIN/df=1.932, GFI=0.863, AGFI=0.856, RMR=0.032, NFI=0.849, CFI=0.920, TLI=0.907, RMSEA=0.066,

***: 0.000.

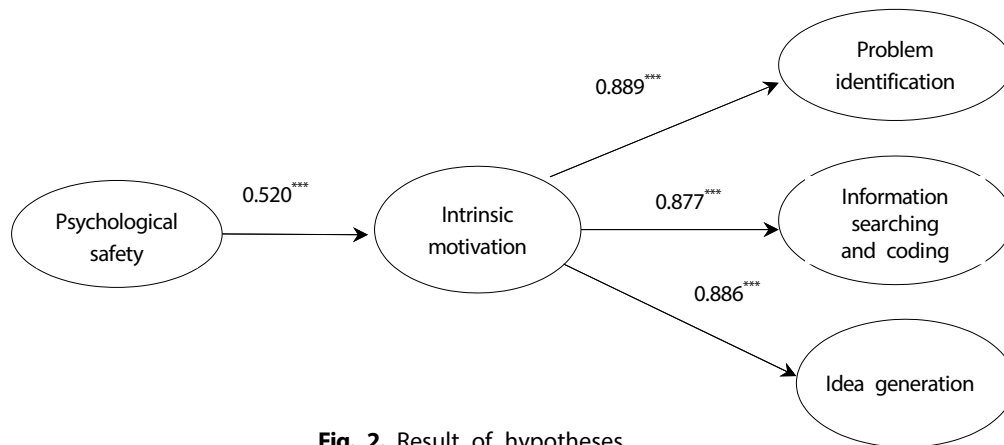


Fig. 2. Result of hypotheses.

4.4. Test of Hypotheses Testing

4.4.1. Results of Overall Measurement Model Testing

According to verification of the theoretical model, it indicates some fit indices are not fulfilled. Thus, modification indices (MI) is used to reach goodness of fit. This model fit can be increased though the correlation of error terms. Hooper, Coughlan, & Mullen (2008) suggested this logics and say "Allowing modification indices to drive the process is a dangerous game, however, some modifications can be made locally that can substantially improve results". Table 6 and Fig. 2 illustrated the strength of the relationships among the constructs, showing path coefficients and overall goodness of model fit indices. Overall, the model is acceptable fit; χ^2 (df : 181)=349.748 ($p=0.000$), GFI=0.920, AGFI=0.856, RMR=0.032, NFI=0.849, TLI=0.907, CFI=0.920, RMSEA=0.066.

4.4.2. Results of Hypotheses Testing

The path coefficients of the constructs were analyzed to examine the suggested hypotheses as follows:

First, hypothesis 1, explaining the impact of the hotel employees' psychological safety on intrinsic motivation has been supported according to the study result with path coefficient of 0.520 for the impact of the hotel employees' psychological safety on intrinsic motivation ($t>1.96$, $p<0.001$).

Second, hypotheses 2-1, explaining the impact of the hotel employees' intrinsic motivation on problem identification has been supported in this study with path coefficient of 0.889 for the impact of intrinsic motivation on problem identification ($t>1.96$, $p<0.001$).

Third, hypothesis 2-2, explaining the impact of the hotel employees' intrinsic motivation on their information seeking

and coding has been supported in this study. The result shows path coefficient of 0.877 for the impact of intrinsic motivation on information seeking & coding ($t>1.96$, $p<0.001$).

Forth, hypothesis 2-3, explaining the impact of the hotel employees' intrinsic motivation on their idea generation has been supported in this study. For example, the path coefficient for the impact of intrinsic motivation on idea generation results in 0.886 ($t>1.96$, $p<0.001$). To this end, hypothesis 2, depicting the relationship between intrinsic motivation on creative process involvement has been significantly supported.

In summary, psychological safety has a significant influence on intrinsic motivation in the hotel industry. In addition, each sub-factor of creative process engagement has been influenced by intrinsic motivation in the hotel industry. In other words, the hotel employees' intrinsic motivation enhances all sub-factors of creative processes engagement including problem identification, information seeking and coding, and idea generation. It is noticeable that the influential value of intrinsic motivation on each sub-factor of creative process engagement does not show big difference and make similar values in path coefficient.

5. DISCUSSION AND CONCLUSIONS

This study has been undertaken with the study needs of investigating the relationship among psychological safety, intrinsic motivation, and creative process engagement in the hotel industry. Targeting the five star deluxe hotel employees, the relationship has been analyzed using structural equation modeling.

The result first indicates that the more the hotel employees

feel psychological safety, the more they are intrinsically motivated. For example, the result reveals that psychological safety makes a significant effect on intrinsic motivation with path coefficient of 0.520. The result is also consistent with the exiting literature suggesting the key role of positive psychology for individuals' intrinsic motivation (Choi & Chang, 2014). This means the hotel employees feel more affection and energy for their works when they have less fear about vocal behaviors. There is still hierarchical and conservative organizational culture in the Korean hotel industry. Thus, the employees are likely have hesitate to stand out with high energy on their works because of fear of relational disadvantage with seniors or bosses. This study result indicates that the hotel practitioners need to make their employees feel safe from speaking out their opinions.

Secondly, the study result support the significant impact of intrinsic motivation on problem identification in the hotel industry. For example, the result indicates that intrinsic motivation makes a significant impact on problem identification with path coefficient of 0.889. In addition, this study result is consistent with the previous studies like Zhang & Gheibi (2015), who focus on individuals' challenge to difficult tasks driven by intrinsic motivation. While the jobs in the hotel organizations are repetitive and stereotyped, there are always challenges and variables the organizations need to resolve. At the same time, the employees in the field are aware of these challenges well. However, non intrinsically motivated employees may not be able to identify such a challenge or problem. Therefore, the hotel leaders need to consider how to enhance their employees' level of intrinsic motivation.

Third, the impact of the hotel employees' intrinsic motivation on their information searching and coding is significantly supported. This study indicates a path coefficient of 0.877 for the impact of intrinsic motivation on information searching and coding. The result is also consistent with the stream of the literature like Crow (2015) who explains the significance of intrinsic motivation on information seeking behaviors. In the information age, the hotel employees' information searching makes organizational development. That is, the hotel practitioners need to value the employees' interest and support their research behaviors without expecting or showing spontaneous outcomes.

Finally, the result indicates that intrinsic motivation makes a significant impact on idea generation in the hotel industry. For example, intrinsic motivation influences idea generation

with a path coefficient of 0.886 and this keeps the consistent stream with the existing literature supporting the relationship between intrinsic motivation and employee voice behavior (Ugurlu & Ayas, 2016). The employees in the Korean hotel industry may feel shy or fearful when they have an opportunity to express their opinions or ideas, however the intrinsically motivated employees have willingness and energy to generate their ideas. Therefore, the hotel managers and practitioners need to be open towards novel ideas and idea generation appreciating the employees' pleasure to join creative process.

6. IMPLICATIONS & LIMITATION

There are several theoretical implications according to the study results. First, it was found that the hotel employees' creative process engagement could be expected by their intrinsic motivation enhanced by psychological safety and this fulfilled the study needs of investigating what makes creative behaviors. Second, this study adds a literature to a theoretical background of consistently influential factors for positive organizational behaviors. Finally, this study draws a structural equation model to explain the impact of intrinsic motivation on each sub-factor of creative process engagement and verifies the critical importance of intrinsic motivation towards creative involvement in the hotel industry.

This study practically implies that the hotel employees need to be motivated through self-determinant factors. In other words, when the employees enjoy their own tasks, they would perform better and find out better ways to manage their organizations rather than work routinely. This study also implies that the hotel employees experiencing psychological safety at work might feel free to make decisions at their discretion so that the hotel organizations need to build organizational system that the employees can express their ideas and opinions without any fear of losing their trust in relationship.

Further, through effective leadership skills, the hotel practitioners intentionally and/or naturally need to build organizational background for the employees to express their ideas and opinions without any fear associated with their careers. For example, Avolio and Luthans (2006) have presented that the more authentic and transformational leaders will make a more positive impact on their subordinates' motivational attitudes. Carmeli, Reiter-Palmon, and Ziv (2010) have more recently proposed that inclusive leaders who include any kinds

of diversity within the organization make a positive impact on their creative involvement in their works as well as the followers' psychological safety. For example, inclusive leadership supports any failure in an effort for work improvement and suggestions given by the employees.

There are several limitations of this study. First, this study adapted self-report survey to the respondents. The individuals tend to evaluate themselves positively so this may influence the study results. Thus, the future study can adopt direct managers' assessment on each employee's creative process engagement.

Second, this study limits positive psychological conditions to psychological safety. The future studies need to seek for other unobserved conditions and states that motivates employees to become engaged in the creative process.

Finally, creative process engagement is an intermediating variable to connect antecedent variables to the hotel employees' creativity. Thus, the future research model needs to draw a relationship among positive conditions, creative process engagement, and creativity.

REFERENCES

- Ahn, S. K. (2010). The impact of motivation and self-activation on career effectiveness and employee satisfaction upon completion of employee training programs of a chain hotel in China: A case study of Sheraton hotel in China. *Culinary Science & Hospitality Research*, 16(5), 118-133.
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality & Social Psychology*, 45(2), 357-376.
- Amabile, T. M. (1985). Motivation and creativity: Effects of motivational orientation on creative writers. *Journal of Personality & Social Psychology*, 48(2), 393-399.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10(1), 123-167.
- Amabile, T. M. (1990). *Within you, without you: The social psychology of creativity, and beyond*.
- Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Westview press.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15(6), 801-823.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader: Moments matter for accelerating authentic leadership development*. New York: McGraw-Hill.
- Bahrami, H., & Evans, S. (1987). Stratocracy in high-technology firms. *California Management Review*, 30(1), 51-66.
- Barron, F., & Harrington, D. M. (1981). Creativity, intelligence, and personality. *Annual Review of Psychology*, 32(1), 439-476.
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260.
- Choi, I. S., & Chang, Y. C. (2014). Mediating effects of intrinsic motivation on the relationship between positive psychological capital, psychological empowerment and creativity. *Journal of the Korea Academia-Industrial Cooperation Society*, 15(6), 3571-3586.
- Crow, S. R. (2015). The information-seeking behavior of intrinsically motivated elementary school children of a collectivist culture. *School Library Research*, 18(1), 1-31.
- Deci, E. L., & Ryan, R. M. (2000). "The what and why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Deci, E. L., & Ryan, R. M. (2002). Overview of self-determination theory: An organismic dialectical perspective. *Handbook of Self-Determination Research*, 3-33.
- Dyne, L. V., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359-1392.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388.
- Gao, L., Janssen, O., & Shi, K. (2011). Leader trust and employee voice: The moderating role of empowering leader behaviors. *The Leadership Quarterly*, 22(4), 787-798.
- Hernandez, W., Luthanen, A., Ramsel, D., & Osatuke, K. (2015).

- The mediating relationship of self-awareness on supervisor burnout and workgroup civility & psychological safety: A multilevel path analysis. *Burnout Research*, 2(1), 36-49.
- Hirak, R., Peng, A. C., Carmeli, A., & Schaubroeck, J. M. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The Leadership Quarterly*, 23(1), 107-117.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Jeon, H. M., & Kwon, N. K. (2017). The study on effect of transformational leadership on cook's intrinsic motivation and creativity in foodservice firm. *Culinary Science & Hospitality Research*, 23(3), 63-76.
- Kahn, W. A. (1990). Psychological condition of personal engagement and disengagement at work. *Academy of Management Journal*, 33(1), 692-724.
- Kanfer, R., Chen, G., & Pritchard, R. D. (2008). The three C's of work motivation: Content, context, and change. In R. Kanfer, G. Chen, & R. D. Pritchard (Eds.), *Work motivation: Past, present, and future* (pp. 1-16). New York: Routledge.
- Kang, H. Y., Park, H. I., & Kim, M. J. (2011). The effect of intrinsic motivation on the employee's performance through empowerment and fairness of the rewards -Focused on the manufacturing industry. *Korean Accounting Information Studies*, 29(3), 249-274.
- Karatepe, O. M., & Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, 24(3), 173-193.
- Kim, G. S. (2007). *AMOS 16.0: Analysis of structural equation model*. Seoul; Han-narae.
- Kwon, N. K., & Lim, S. H. (2016). The effects of hotel employees' emotional intelligence and job engagement on work performance. *Culinary Science & Hospitality Research*, 22(7), 22-35.
- Lee, H. Y. (2006). *Data analysis using SPSS*. Seoul: Chung Ram.
- Marsh, H. W., Hau, K., & Wen, Z. (2004). In search of golden rules: Comments on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu & Bentler's findings. *Structural Equation Modeling*, 11(1), 320-341.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational & Organizational Psychology*, 77(1), 11-37.
- Mgedezi, S., Toga, R., & Mjoli, T. (2014). Intrinsic motivation and job involvement on employee retention: Case study-A selection of eastern cape government departments. *Mediterranean Journal of Social Sciences*, 5(20), 2119-2126.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40(6), 1453-1476.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, 13(6), 705-750.
- Noar, S. M. (2003). The role of structural equation modeling in scale development. *Structural Equation Modeling*, 10(4), 622-647.
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607-634.
- Perry-Smith, J. E. (2006). Social yet creative: The role of social relationships in facilitating individual creativity. *Academy of Management Journal*, 49(1), 85-101.
- Pinder, C. C. (1998). *Work motivation in organizational behavior*. Upper Saddle River, NJ: Prentice Hall.
- Phoocharoon, P. (2014). Designing process intensity to promote employee creativity: Transformational leadership on macro-micro level origins integration. *Journal of Business & Economics*, 5(9), 1637-1646.
- Reiter-Palmon, R., & Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *The Leadership Quarterly*, 15(1), 55-77.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied Psychology*, 76(2), 179-185.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52(3), 591-620.

- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational psychology research. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 41(4), 213-226.
- Ugurlu, O. Z., & Ayas, S. (2016). The relationship between psychological safety and employee voice: The mediation role of affective commitment and intrinsic motivation. *Journal of Business Research Turk*, 8(1), 223-239.
- Utman, C. H. (1997). Performance effects of motivational state: A meta-analysis. *Personality and Social Psychology Review*, 1(2), 170-182.
- Yang, J. G., & Kim, J. K. (2011). A study of the effects of champion's transformational leadership on belts' creativity: Based on mediate effects of belts' intrinsic motivation and project's learning and growth. *Journal of the Korean Society for Quality Management*, 39(2), 256-270.
- Zhang, P., & Gheibi, S. (2015). From intrinsic motivation to employee creativity: The role of knowledge integration and team psychological safety. *European Scientific Journal*, 11(11), 380-392.

Received: 23 August, 2017

Accepted: 25 September, 2017