

Innovative Behavior: Relations with Developmental Culture, Psychological Empowerment, Distributive Justice and Organizational Learning Capacity

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Abstract

Competitive advantage has a significant role in organizations' survival and the key path to achieve that advantage passes through innovation. Organizations need employees who do not just create new ideas but also implement them. These innovative behaviors may provide great contributions to both organizational performance and success. There are certain factors which motivate employees to exhibit such behaviors. Concordantly, the present study aims to discover how innovative behaviors of employees are related with developmental culture and psychological empowerment as well as distributive justice and organizational learning. The study sample included 276 participants from the aviation sector. The study data were collected through the survey method and data analysis was performed via SPSS and AMOS programs. The results showed that developmental culture and psychological empowerment had positive relationships with innovative behavior, whereas distributive justice and organizational learning capacity positively affected developmental culture.

Keywords: innovative behavior, developmental culture, psychological empowerment, distributive justice, organizational learning capacity

1. Introduction

Innovativeness is highly important for organizations to ensure productivity, efficiency and organizational competition (Osterloh and Frey, 2000). To create better and novel processes for a dynamic and competitive workplace environment, organizations have to benefit from the innovative potential of their employees. Innovative behavior of an employee is defined as deliberately adopting or applying new ideas about products and processes to the job position, job group or whole organization (West and Farr, 1989). Examples may include behaviors toward discovering new technologies, suggesting novel ways for goal achievement, implementing new working methods, securing resources required to apply new ideas and finding new resources (Yuan and Woodman, 2010). Innovative behavior is discussed in several aspects in relation to the phases of innovation process. According to Scott and Bruce (1994), innovative behavior is a process involving multiple phases. Every stage is associated with different individual behaviors and actions.

Innovative behavior is likely to relate with certain variables affecting employee perceptions, attitudes and behaviors such as psychological empowerment and organizational culture. Empowerment, the first variable discussed in the present study, is a psychological process based on the multidimensional conceptualization developed by Spreitzer (1995). It represents a set of employee perceptions resulting in a sense of motivation and capability, mostly based on work conditions (Spreitzer, 1995). Another variable that may affect innovative behaviors is organizational culture. A developmental culture is one of the external-oriented cultures from 4 subdimensions of organizational culture based on the approach of Quinn and Spreitzer (1991). The developmental culture supports flexibility and transformation while focusing especially on the external environment. Such culture emphasizes development, novelty and adjustment to the external environment.

A developmental culture may be enhanced by organizational learning capacity and organizational justice. The organizational learning capacity and adaptation ability are believed to increase the organizational lifetime and performance (Dibella et al., 1996; Stata, 1989) and are also associated with innovation (Forrester, 2000; Liao et al., 2008). Employees working in an organization providing such capacity are likely to have greater job satisfaction, which would foster the performance of that organization. Employees are also particularly concerned

with justice in an organization because organizational justice is related with organizational outcomes such as motivation, organizational atmosphere, employee satisfaction, effectiveness and devotion (Forret and Love, 2008), and therefore it may have an impact on developmental culture. In this regard, the present study discusses innovative behavior by examining its relationships with psychological empowerment, developmental culture, distributive justice and organizational learning capacity.

2. Innovative Behavior

Change is essential to organizations of this modern era, and it is realized through innovation. Organizations aim not just to provide products and services, but also to survive through changes. During such process, innovation capacity stands out as a significant factor affecting organizations' future. Therefore, organizations are especially interested in innovation as they struggle to survive through their lifespan.

Innovative business is usually realized through the innovative behaviors of employees. Employees contribute to this process by presenting creative ideas, processes and methods, which is generally called innovative behavior (Mura et al., 2012). Innovative behavior is about providing and then applying novel ideas to the current business setting. Such behaviors are generally expected to yield innovative outputs. These behaviors specifically come out in case of a work issue, unsatisfactory performance or necessity for creativity (De Jong and Den Hartog, 2010).

Innovative behavior is a concept originated from the research on innovation. Based on the innovation theory, innovation is not just human creativity, but also involves implementing ideas (King and Anderson, 2002; De Jong and Den Hartog, 2008). The literature on innovative behavior consists of several descriptions and conceptualizations by various scholars. According to West and Farr (1990), innovative behavior refers to generating, improving and realizing novel ideas concerning a job role or an organization toward better performance. Scott and Bruce (1994), based on the study by Kanter (1988), described 3 dimensions for innovative behavior: idea generation, promotion and implementation. De Jong and Den Hartog (2008) suggested that innovative behavior concerns with behaviors about creativity such as searching opportunities and producing novel ideas and behaviors of implementation such as applying changes, novel information or advancing processes for better performance of the individual and the organization.

The literature contains various researches studying the determinants of innovative behavior from organizational, individual and contextual angles (Mumford et al., 2002; Sanders et al., 2010; Taştan, 2013). One of the leading works, the study by Hurt et al. (1977) investigated individual innovative behaviors from a personality perspective using generalized desire to change. The individual differences mostly examined include individual characteristics such as innovative propensity and intrinsic interest (Janssen and van Yperen, 2004; Yuan and Woodman, 2010), cognitive characteristics such as style of solving issues and ownership of issues (Scott and Bruce, 1994; Dorenbosch et al., 2005), and self-efficacy (Farr and Ford, 1990; Bandura, 1997). Among the organizational and contextual factors studied, behaviors of the supervisor have been reported as a significant factor affecting innovative work behaviors (Scott and Bruce, 1994; Mumford et al., 2002).

The present study focuses on personal innovative behaviors and discusses innovative behavior as behaviors of employees such as easily solving problems within an organization, taking risks, creating innovative ideas, having a vision (Lee and Peterson, 2000; Antoncic and Hisrich, 2003), taking initiative and having the desire for achievement, while investigating the effect of developmental culture, psychological empowerment, distributive justice and organizational learning capacity.

3. Psychological Empowerment

Psychological empowerment has recently gained considerable interest of organizational scholars and practitioners because it has an important influence on both employee work outcomes (e.g. job satisfaction, commitment and productivity), and organizational outcomes (e.g. corporate performance and reputation) (Conger et al., 2000; Staw and Epstein, 2000). Psychological empowerment is one of the recent managerial approaches used by organizations to keep up with the dynamism, competition and transformation manifested in employees and customers of today's business world. In a general sense, psychological empowerment refers to providing power to employees representing an employee's sense of motivation and capability regarding the fulfillment of expectations at work (Spreitzer, 1995).

Psychological empowerment has its origins in the self-efficacy work by Bandura (1977, 1982). It basically refers to the cognitions or perceptions of employees. Psychological empowerment is defined by Thomas and Velthouse (1990) as intrinsic motivation revealed in changing cognitions. Advancing this perspective, Spreitzer (1995) conceptualized psychological empowerment as an adaptive motivation with 4 cognitive elements: meaning, competence, autonomy and impact. Meaning is the sense that the goal of the work is important and meaningful

to the individual; competence refers to the efficacy feelings of the individual toward skill performance; autonomy refers to determining one's own actions; and impact refers to the degree to which an individual has effect on the work-related consequences. Accordingly, psychological empowerment is not a permanent personality trait but rather involves a number of perceptions based on work conditions (Spreitzer, 1995). Work environments providing empowerment trigger having a greater sense of meaning, autonomy and impact (Faulkner and Laschinger, 2008).

Psychological empowerment causes individuals to have a sense of a certain level of autonomy, a lower extent of restriction by the rules and a certain degree of competency in work achievement, all of which result in innovative behaviors when combined (Amabile and Grykiewicz, 1989; Spreitzer, 1995). Knight-Turvey (2006) established a strong association between empowerment and innovation. Innovation capability and an organizational innovation culture have been demonstrated to boost when employees are involved in decision-making processes and information is shared all around the organization (Ogbonna and Harris, 2000). The study by Ford and Randolph (1992) suggested that new product performance and innovation highly depends on successful empowerment. Brunetto and Farr-Wharton (2007) indicated that psychological empowerment produces significant consequences such as reciprocal trust and greater cooperation, which are vital components of innovation.

This theoretical background led us to develop our first hypothesis as follows:

H1: Psychological empowerment has a positive effect on innovative behavior.

4. Developmental Culture

A culture of an organization is the body of values, the basic assumptions of which are developed by a certain group, instructing the ways of overcoming external adaptation and internal integration issues with accepted validity, and therefore employees are required to learn in order to feel, perceive and think properly. In this regard, organizational culture consists of certain beliefs and values commonly shared by the employees of an organization regarding a solid strategy for noticing and resolving problems (Sigler and Pearson, 2000). Such organizational beliefs and values create a bond among the employees and form a perspective to accomplish organizational goals (Marcoulides and Heck, 1993).

Organizational culture is described in 4 subdimensions: hierarchical, group, rational and developmental (Quinn and Spreitzer, 1991). Several aspects of organizations determine the culture type, such as leadership, reward system, etc. The group culture is based on empowerment, consideration and participation. The hierarchical culture refers to control, formality and stability. These two cultures, group and hierarchy, are internal-oriented with no focus on the environment. The rational culture concentrates on task achievement with specific emphasis on quality and productivity. The development culture requires flexibility and creativity for maintaining growth and changes. These two cultures, in turn, are external-oriented, referring to competition and marketing.

A developmental culture is an external-oriented subculture based on flexibility that includes change, openness, adaptability and responsiveness (Quinn, 1988). The flexibility values of organizations enable the clarification of certain factors such as encouraging free information flow that involves open and wide-range communication channels, loose and informal controls and all hierarchical degrees. The primary motives of this culture are development, creativity, encouragement and assortment.

The present study discusses only developmental culture from the organizational culture based on the conceptualization by Quinn and Spreitzer (1991). As a sub dimension of organizational culture, a developmental culture is based on development, adaptability, innovation and creativity and positively contributes to employee motivation specifically on learning (Scott et al., 2003; Lok et al., 2005).

The literature contains several studies directly investigating the relationship between developmental culture and innovation. For instance, Lau and Ngo (2004) established a positive impact of developmental culture on innovation. Wei et al. (2011) found a positive impact of developmental culture on product innovation. Accordingly, the second hypothesis of the present study is formulated as follows:

H2: Developmental culture has a positive effect on innovative behavior.

5. Distributive Justice

In recent years, management researchers have shifted their attention to organizational justice, which considerably contributes to shaping employee attitudes and behaviors (Clay-Warner et al., 2005). Organizational justice is the fairness to employees in an organization (Randeree, 2008). The term was first conceptualized by Greenberg in 1987 and reflects the employees' perceptions of the extent to which an organization is fair to its employees.

Justice is a concept of moral or ethical correctness. It can be associated with ethics, religion, rationality and law. Organizational justice or fairness may manifest itself in employees' perceptions of fair treatment regarding financial conditions, promotion opportunities and employment requirements (Tabibnia et al., 2008). Therefore, it is considered as a complex whole of different components. Nevertheless, organizational justice is usually discussed as consisting of 3 basic elements: distributive, procedural and interactional justice. Interactional justice also covers informational and interpersonal justice dimensions (Adams, 1965; Bies and Moag, 1986).

The present study discusses only distributive justice from the organizational justice perspective. Fairness studies have emerged from the equity theory by Adams (1965), discussing the fairness perceptions of consequences, which is now called distributive justice.

Distributive justice concerns whether the properties and resources that are socially valuable are distributed justly and whether a person gets a just outcome (Frohlich, 2007). In other words, distributive justice addresses the fairness perceptions about reward-cost sharing among the members of an organization (Forsyth, 2006). The said resources and outcomes can be both tangible such as payment and intangible such as appreciation. The extent to which employees perceive distributive justice can be increased when outcome implementation is equal (Adams, 1965).

Distributive justice is likely to have significant implications in the organizational context, which has led scholars to investigate how organizational outcomes such as promotion decisions and payment criteria are perceived in terms of fairness, and how such perceptions are linked to different variables such as work quality and quantity (Walster et al., 1978). Since it emphasizes consequences, distributive justice is usually considered as related to affective, cognitive and behavioral responses to certain consequences. Accordingly, when an employee's perception of a certain consequence is unfair, it creates an impact on his/her feelings such as delight, guilt or dignity (Weiss et al., 1999), cognitions such as distorted thoughts of himself/herself or others (Walster et al., 1978) and behaviors such as performance.

Due to this theoretical background, the third hypothesis of the present study is developed as follows:

H3: Distributive justice has a positive effect on developmental culture.

6. Organizational Learning Capacity

The process of organizational learning is a significant line of research in management literature. Organizational learning process is important to organizations because they produce, distribute and use knowledge and turn that knowledge into innovation through this process (March, 1991). Such process is considered related with both conscious and unconscious components of the self, knowledge acquisition, information access and information assessment (Easterby and Lyles, 2003). It involves 4 sub processes, the first of which is obtaining knowledge. The organization acquires information during this process. The second is the knowledge dissemination, during which knowledge is shared by the employees with the organization. The third sub process is knowledge construction, during which individuals construct the knowledge and turn it into new but common information, and the fourth sub process is to store such information for future use.

Due to the increasing dynamism and highly advanced information technologies in today's businesses, knowledge has become the critical resource for gaining a competitive edge (Grant, 1996). The literature on organizational studies emphasizes the need to foster the intellectual potential and knowledge dissemination among employees in an organization (Huber, 1991; Hult et al., 2001). A unique value can be created by the intangible resource, which is the knowledge specific to the organization. Accordingly, knowledge and knowledge-developing potential can be considered as the major resources of added value creation. Such potential is called organizational learning capacity.

Organizational learning capacity is the organizational and managerial characteristics of the elements that enable an organization to learn and encourage processes of learning, and this capacity is significant for organizations to have a sustainable competitive edge through better organizational performance (Jiménez- Jiménez and Sanz-Valle, 2011). In the learning process of an organization, employees are major actors who are likely to have a strong impact on organizational behaviors and growth potential due to their common experiences and perceptions of producing novel information (Senge, 1990; Slater and Narver, 1995).

Individuals' capability to benefit from learning opportunities can be induced by enhanced capacity of learning (Aydin and Ceylan, 2009). Accordingly, organizations with greater organizational learning capability can drive their employees to experience greater satisfaction that will create a better organizational performance. Besides, such organizations are likely to possess more resources of information, which would manifest itself both in themselves and their employees. The study by Lien et al. (2007) reported that organizational learning is a further

step of organizational development and suggested that organizational learning is a way to transform organizations. The study by Shoid and Kassim (2012) demonstrated that employees have similar and moderately positive perceptions of organizational culture, teamwork collaboration and information performance. The authors also found that organizational culture and teamwork collaboration are strongly related.

Prior studies suggest that organizational learning capacity is one of the major components of innovation because it is based on producing novel ideas and inducing creativity in case of organizational support for innovation (Liao et al., 2008). In a similar vein, Argyris and Schon (1978) indicated that an organization's capacity of innovation is improved by organizational learning. The study by Forrester (2000) also established that organizational learning positively affects innovation.

According to this theoretical background, the fourth hypothesis of the present study is developed as follows:

H4: Organizational learning capacity has a positive effect on developmental culture.

7. Methodology

7.1 Research Goal

The objective of our study is to discover the relationships among innovative behavior, developmental culture, psychological empowerment, distributive justice and organizational learning capacity. For this purpose, we developed a model supposing that innovative behavior is positively related with psychological empowerment and developmental culture, and developmental culture is positively related with distributive justice and organizational learning capacity.

7.2 Participants and Procedure

The study included a sample of 276 participants (144 female and 132 male) who were aviation employees. Convenience sampling method was used to select such participants and the survey method was used to collect study data. The questionnaires included 56 items and were filled out online. The collection of data took 4 weeks.

7.3 Measures

The questionnaire consisted of 2 groups of questions. The first one addressed participant demographics including age, gender, education and work experience. The second group, in turn, involved scale items related to innovative behavior, psychological empowerment, developmental culture, distributive justice and organizational learning capacity.

Innovative behavior was measured via an instrument introduced by Scott and Bruce (1994). The instrument is a 5-point Likert scale (1=strongly disagree; 5= strongly agree) and includes 6 items. (e.g. "I generate creative ideas" and "I am innovative"). The reliability coefficient of the original scale was 0.89.

Psychological empowerment was measured using an instrument with 12 items. It was first developed by Spreitzer (1995). The instrument is a 5-point Likert scale (1=strongly disagree; 5= strongly agree) and involves 4 subdimensions: meaning (e.g., "The work I do is very important to me"), competence (e.g., "I am confident about my ability to do my job"), self-determination (e.g., "I have significant autonomy in determining how I do my job") and impact (e.g., "My impact on what happens in my department is large"). The reliability coefficient of the original overall scale was 0.89.

Developmental culture was measured using an instrument with 8 items. It was first developed by Tseng and Lee (2009). The instrument is a 5-point Likert scale (1=strongly disagree; 5= strongly agree) with examples such as "Our company emphasizes on creativity for the new productivity and service" and "Our company flexibly gets the new challenge". The reliability coefficient of the original scale was 0.73.

Distributive justice was measured using an instrument with 9 items. It was developed by Niehoff and Moorman (1993) as a 5-point Likert scale (1=strongly disagree; 5= strongly agree) with examples such as "Job decisions are made by the manager in a biased manner" and "To make job decisions, my manager collects accurate and complete information". The reliability coefficient of the original scale was 0.91.

Organizational learning capacity was measured using an instrument with 21 items that were developed by Teo et al. (2006) as a 5-point Likert scale (1=strongly disagree; 5= strongly agree). Examples include "All activities that take place in business transaction processes are clearly defined" and "My firm is susceptible to new technology and/or method to do business". The reliability coefficient of the original scale was >0.70.

8. Results

8.1 Statistical Analysis

The survey responses collected in the research were analyzed and interpreted using SPSS Statistics 22.00 and AMOS 22.0 programs. Factor analyses were performed for the study instruments and the reliability coefficients were found above 0.7. The adequacy of the 5 scales for the factor analysis was analyzed, and AMOS software was used to conduct individual confirmatory factor analyses (CFA) as well as to make the path analysis related to the model developed via structural equation modeling.

8.2 Participants' Demographics

Table 1. Participants' Demographics

		n	%
Gender	Male	132	47.8%
	Female	144	52.2%
Age	<25	55	20.1%
	25-29	115	42.1%
	30-34	64	23.4%
	≥35	39	14.3%
Educational Status	Primary School	102	38.8%
	High School	144	54.8%
	Bachelor's degree	12	4.6%
	Graduate	5	1.9%
Position	Manager	156	57.8%
	Deputy Manager	15	5.6%
	Chief	19	7.0%
	Supervisor	25	9.3%
Corporate Seniority	5.00	11	4.1%
	6.00	44	16.3%
	<1 year	84	31.2%
	1-2 years	51	19.0%
Work Experience	2-3 years	60	22.3%
	≥3 years	74	27.5%
	<1 year	56	20.9%
Work Experience	1-5 years	106	39.6%
	5-10 years	74	27.6%
	≥10 years	32	11.9%

8.3 Confirmatory Factor Analysis of Study Scales

Using AMOS 22.0 software, confirmatory factor analyses were conducted for each study scale to analyze the individual significance of the measurement models. Accordingly, the models were found significant. Afterwards, fit indices were used to assess if the whole model was adequate.

8.3.1 Distributive Justice Scale

The 8-item scale of distributive justice was evaluated by implementing a confirmatory factor analysis and the data were found to exhibit an excellent fit as it had a single-factor structure with KMO=942 and Bartlett's test p-value ($p < 0.05$). The rate of variance explanatoriness was 76.7%.

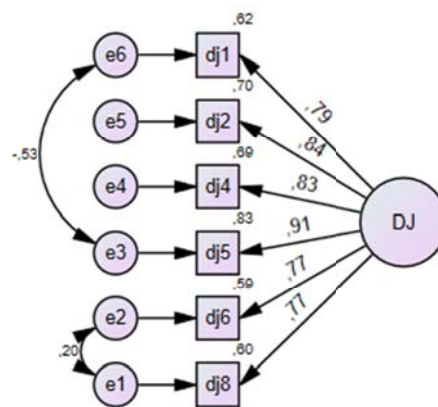


Figure 1. CFA of Distributive Justice Scale

The confirmatory factor analysis was significant based on the model test values [$\chi^2(20.37)$, $\chi^2/df(2.862)$ and $p < 0.05$]. Besides, the fit indices [**GFI** (.921), **CFI** (.956), **RMSEA** (.068)], which were within the acceptable limits, suggested that the analysis result was applicable (Fig.1).

8.3.2 Developmental Culture Scale

The 8-item developmental culture scale was tested by implementing a confirmatory factor analysis and the data were found to exhibit an excellent fit as the scale had a single-factor structure with $KMO = .940$ and Bartlett's test p -value ($p < 0.05$). The rate of variance explanatoriness was 77.89% (Fig.2).

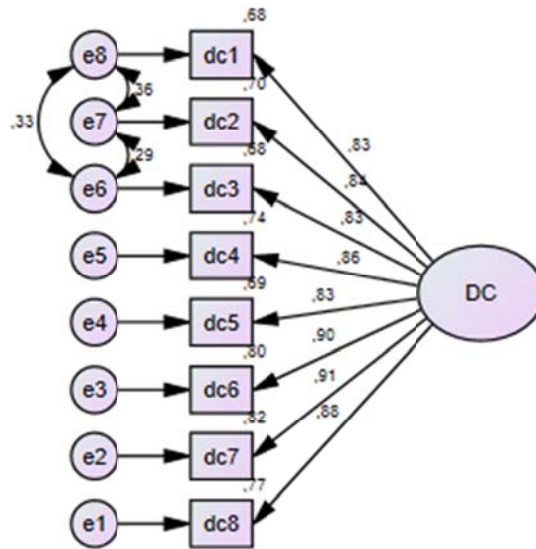


Figure 2. CFA of Developmental Culture Scale

The confirmatory factor analysis was statistically significant based on the model test values [$\chi^2(80.204)$, $\chi^2/df(4.718)$ and $p < 0.05$]. The fit indices [**GFI** (.910), **CFI** (.940), **RMSEA** (.078)], which were within the acceptable limits, indicated that the analysis result was applicable.

8.3.3 Innovative Behavior Scale

The 6-item innovative behavior scale was assessed by implementing a confirmatory factor analysis and the data were found to exhibit an excellent fit as it had a single-factor structure with $KMO = .911$ and Bartlett's test p -value ($p < 0.05$). The rate of variance explanatoriness was 77.2% (Fig. 3).

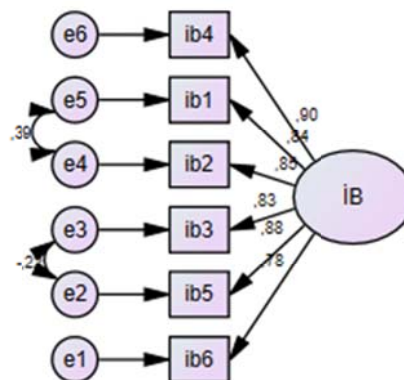


Figure 3. CFA of Innovative Behavior Scale

The confirmatory factor analysis was significant based on the model test values [$\chi^2(16.819)$, $\chi^2/df(2.403)$ and $p < 0.05$]. The fit indices [**GFI** (.945), **CFI** (.994), **RMSEA** (.071)], which were within the acceptable limits, indicated that the analysis result was applicable.

8.3.4 Organizational Learning Capacity Scale

Figure 4 shows the CFA of the organizational learning capacity scale with 4 dimensions as in the original scale. The confirmatory factor analysis of the organizational learning capacity scale with 21 items showed that the data exhibited an excellent fit as it had a three-factor structure with KMO=.964 and Bartlett's test p-value ($p < 0.05$). The rate of variance explanatoriness rate was 75.16%.

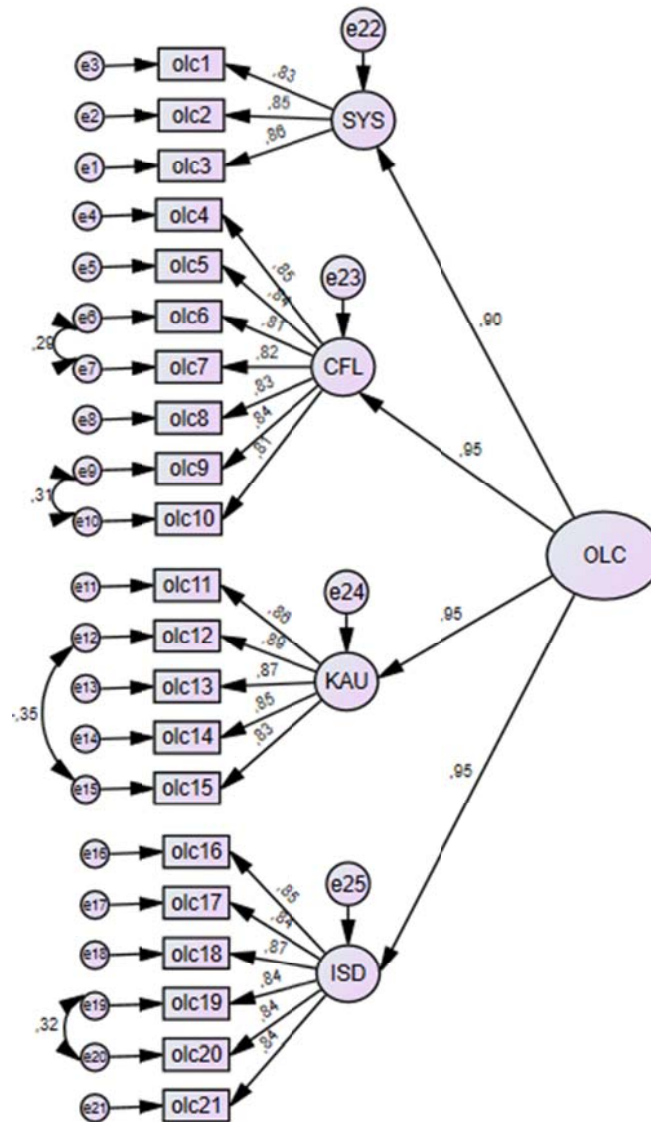


Figure 4. CFA of Organizational Learning Capacity Scale

The confirmatory factor analysis of the organizational learning capacity scale was significant based on the model test values [$\chi^2 (606.45)$, $\chi^2/df (3.351)$ and $p < 0.05$]. The fit indices [**GFI** (.902), **CFI** (.9503), **RMSEA** (.073)], which were within the acceptable limits, suggested an applicable CFA result.

8.3.5 Psychological Empowerment Scale

The 12-item scale of psychological empowerment was assessed by implementing a confirmatory factor analysis which showed an excellent fit with a three-factor structure, KMO=.903 and Bartlett's test p-value ($p < 0.05$). The rate of variance explanatoriness was 82.102%.

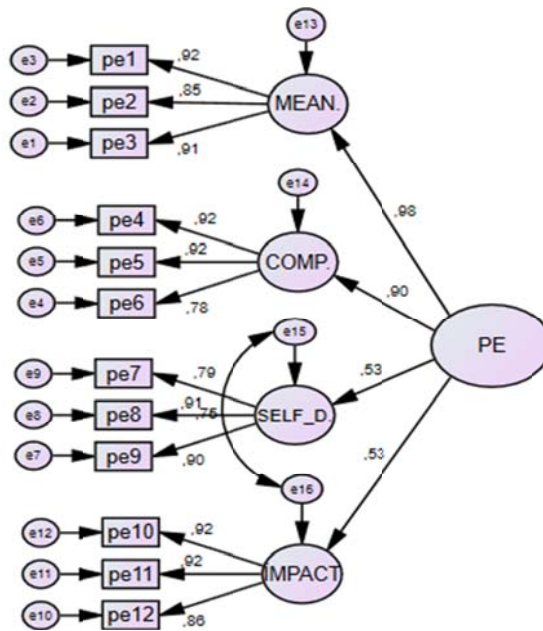


Figure 5. CFA of Psychological Empowerment Scale

The confirmatory factor analysis was statistically significant according to the model test values [$\chi^2 (150.587)$, $\chi^2/df (3.0703)$ and $p < 0.05$]. The fit indices [*GFI* (.923), *CFI* (.968), *RMSEA* (.078)], which were within the acceptable limits indicated an applicable CFA result for this scale (Fig.5).

8.4 Path Analysis of Structural Equation Model (SEM)

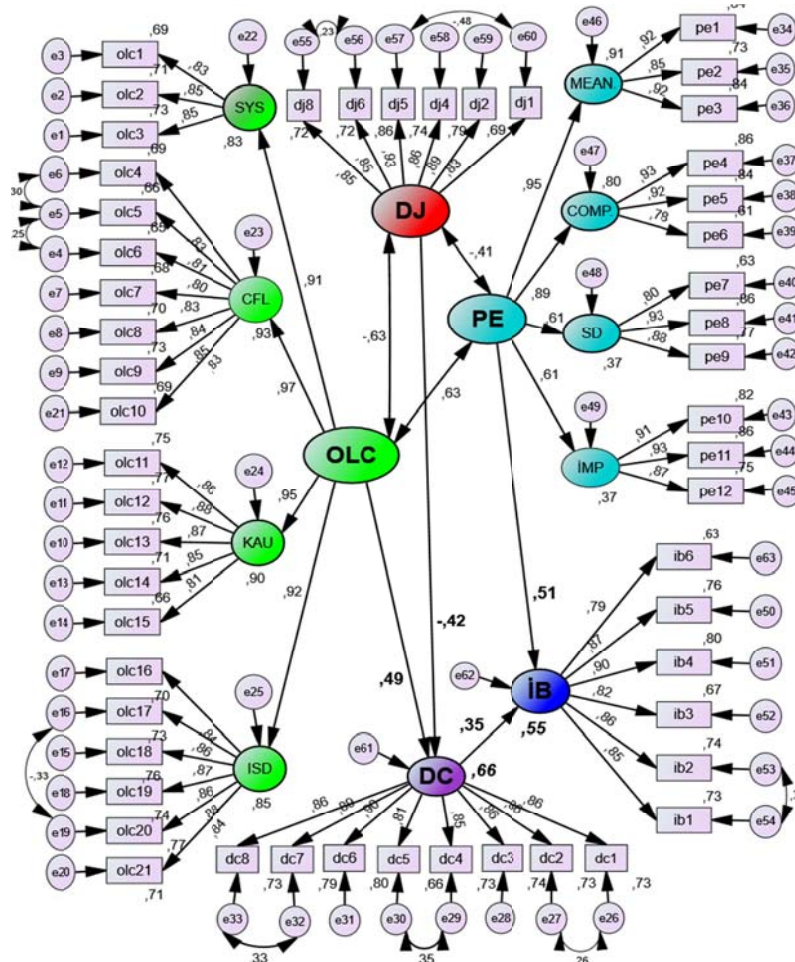


Figure 6. Path analysis of the model created via structural equation modeling

A path diagram was drawn with the help of AMOS 22.0 software to examine the relationships assumed in the hypotheses, and the structural parameters were estimated via the method of Maximum Likelihood. The path diagram of the model is presented in Fig. 6. The AMOS SEM program provides analysis results separately as standardized and non-standardized coefficients. The standardized coefficients were used in this analysis for understandability.

Since the chi-square value calculated for the model fit in the structural equation modeling may lead to incorrect decisions as it is affected by the sample size and the number of variables, the decision is made based on (χ^2/df) criterion instead of this value (Schermelleh-Engel et al., 2003).

Table 2. Standard Good Fit Indices and the Fit Indices Calculated for the Model

no	Fit Indices	Good Fit	Acceptable Fit	Model
1	χ^2	-	-	2650,36 (df=1302) p<0.05)
2	χ^2/df	$0 < \chi^2/df < 2$	$2 < \chi^2/df < 3$	2.036
3	RMSEA	$0 < RMSEA < 0.05$	$0.05 < RMSEA < 0.08$	0.061
4	GFI	$0.95 < GFI < 1.00$	$0.90 < GFI < 0.95$	0.902
5	CFI	$0.97 < AGFI < 1.00$	$0.95 < AGFI < 0.97$	0.951
6	SRMR	$0 < SRMR < 0.05$	$0.05 < SRMR < 0.10$	0.069

The model was found statistically significant as $\chi^2/df = 2.036$ and $p < 0.05$. This value is within the "acceptable fit" limits. RMSEA was 0.061, GFI was 0.902, CFI was 0.951 and SRMR was 0.069. Fit indices related to the model fit are presented in Table 2. These values indicate that the research model is within the acceptable limits.

In the model, it was found that organizational learning capacity (OLC) and distributive justice (DJ) affect developmental culture (DC), whereas these variables do not have any direct effect on innovative behavior (IB). Psychological empowerment (PE) was found not to affect developmental culture (DC); however, this variable has a direct effect on innovative behavior (IB). Additionally, it was found that developmental culture (DC) has a direct effect on innovative behavior (IB).

Regarding mutual correlations, there is a negative significant correlation between distributive justice (DJ) and organizational learning capacity (OLC) (.063), a negative significant correlation between psychological empowerment (PE) and distributive justice (DJ) (.41), and a positive significant correlation between psychological empowerment (PE) and organizational learning capacity (OLC) (.63).

The following table was prepared to have a better understanding of the results obtained from the model.

Table 3. Regression and determination coefficients calculated from the model

Affected	Effect	Affecting	Standardized coefficients	Non-standardized coefficients	z	p
DC	<---	DJ	.408	.054	7.604	**
DC	<---	OLC	.475	.056	8.407	**
IB	<---	DC	.252	.040	6.334	**
IB	<---	PE	.344	.042	8.135	**
Structural Equations						R²
DC= .408*DJ+0.54*OLC						66%
IB=.252*DC+.344*PE						54%

** $p < 0.001$

- The standardized regression coefficient indicating the effect of distributive justice (DJ) on developmental culture (DC) was .408 ($p < 0.001$), which is significant. Distributive justice (DJ) has a positive effect on developmental culture (DC).
- The standardized regression coefficient indicating the impact of organizational learning capacity (OLC) on developmental culture (DC) was .478 ($p < 0.001$), which is significant. Organizational learning capacity (OLC) positively affects developmental culture (DC).
- The standardized regression coefficient indicating the effect of developmental culture (DC) on innovative behavior (IB) was .252 ($p < 0.001$), which is significant. Developmental culture (DC) has a positive effect on innovative behavior (IB).
- The standardized regression coefficient indicating the effect of psychological empowerment (PE) on innovative behavior (IB) was .344 ($p < 0.001$), which is significant. Psychological empowerment (PE) has a positive effect on innovative behavior (IB).

- In the model; developmental culture (DC) could be explained by organizational learning capacity (OLC) and distributive justice (DJ) at a rate of 66%, and innovative behavior could be explained by developmental culture (DC) and psychological empowerment (PE) at a rate of 54%.

9. Discussion and Conclusion

The present study examined the relationships among innovative behavior, developmental culture, psychological empowerment, distributive justice and organizational learning capacity. The results indicated that both developmental culture and psychological empowerment have a significantly positive impact on innovative behaviors. Additionally, the results showed that developmental culture is significantly and positively affected by distributive justice and organizational learning capacity. We believe that this study advances the available literature by demonstrating how innovative behaviors are linked to the culture and empowerment settings in an organization as well as how justice and learning capacity can foster a developmental culture of an organization.

The first finding of the present study indicated a positive relationship between psychological empowerment and innovative behaviors, as assumed in Hypothesis 1. More specifically, it was found that the meaning and competence subdimensions had the strongest relationship with innovative behavior, compared to other subdimensions. This suggests that employees who consider their work meaningful and believe they can accomplish tasks are more likely to engage in innovative behaviors. This result is in agreement with Spreitzer (1995) and Faulkner and Laschinger (2008). This finding contributes to the understanding of individual variables underlying innovative behaviors. Organizations may use this finding to create a sense of meaning in their employees' mind and provide support to foster their efficacy beliefs, and thereby, they can gain a greater competitive edge in the business world. In this regard, future studies may examine why meaning and competence have stronger influence on employees compared to self-determination and impact.

The second finding of the present study contributes to the extant knowledge on innovative behaviors. Innovative behaviors have been investigated from several perspectives (e.g. Sanders et al., 2010; Janssen and van Yperen, 2004), and supervisor actions have been significantly associated with such behaviors in the organizational context (e.g. Scott and Bruce, 1994; Mumford et al., 2002). As assumed in Hypothesis 2, developmental culture, as an organizational variable, was found to have a significant positive influence on innovative behaviors. This finding is in line with the studies by Lau and Ngo (2004). Based on this result, we recommend organizations to enable flexibility and information-sharing within their structure in order to create such organizational culture. Besides, the relationship of innovative behavior with other organizational subcultures can be investigated by future studies to reveal the various effects of cultures on employee behaviors in an organization.

The third finding, consistent with the Hypothesis 3, showed that developmental culture is significantly and positively associated with distributive justice. This finding can advance the literature on organizational culture as well as innovation. Within the authors' knowledge, there is no pre-existing study on the direct relationship between distributive justice and developmental culture. Therefore, the present study can contribute to the literature which is scarce on such relationship. Since a developmental culture is related to innovative behaviors, the organizational mechanisms leading to a developmental culture can play a huge role in encouraging innovation among employees. As the perception of fair treatment is linked to individual and organizational outcomes (Weiss et al., 1999), organizations may investigate whether their employees perceive their treatment as fair and take necessary actions according to the results. In this context, future studies may explore what employees perceive as fair and unfair, and their links to other employee attitudes.

The fourth finding, as consistent with the Hypothesis 4, illustrated that organizational learning capacity has a significantly positive effect on developmental culture. This can contribute both to the organizational and management literatures. The literature provides support for the idea that intellectual potential and information distribution are required to increase among employees (e.g. Huber, 1991; Hult et al., 2001). Organizations would have employees with a greater sense of satisfaction when they enhance learning capacity (Aydin and Ceylan, 2009), which may result in several favorable outcomes for organizations such as development, innovation and competition. Therefore, we recommend organizations to invest in training their supervisors or human resources departments on how to develop this ability and drive employees' capabilities of learning. Additionally, future studies may attempt to determine the dimensions of organizational learning capacity by considering different variables such as reward systems or career development.

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