

Institutional Pressure:

The Impact on Innovation, Participation, Stress, and Performance

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Abstract

Although much of the research within new institutionalism deals with how institutional pressure results in similarity of organizational behaviors, some of the recent work has focused on how institutional pressure also affects organizational change and innovation. Abrahamson(1991) suggested that innovations in organization could be diffused like fads and fashions. On the other hand, Meyer & Rowan(1977) assumed that organizations take a step towards decoupling informal practices from formally adopted policies when institutional demands and technical demands are inconsistent. Though the latter work makes sense both at the macro and the micro levels, micro level analysis has, so far, received relatively limited attention in academic research. Through a field study of a large Korean quasi-government entity where a management innovation program is introduced top-down, we aim to empirically demonstrate the relationships among institutional pressure of innovation, participation of members, participants' stress on the innovation program, performance, and decoupling of performance from participation.

The result from regression analysis based on survey data of a large Korean quasi-government entity suggests that 1) institutional pressure has a positive correlation with participation of organizational members, 2) institutional pressure has a positive correlation with performance of innovation, 3) innovation stress mediates the relationship between institutional pressure and performance of innovation, and 4) performance of innovation decouples from participation in management innovation program. Rigid organizational structure and personal innovative tendency have negative and positive correlation with performance of innovation, respectively.

These results support our premise that institutional pressure can affect not only the adoption of innovation program at organizational level, but also the receptivity of innovation and performance improvement at individual level. Also, the evidence on decoupling between participation and performance implicitly suggests that innovation programs should be discreetly adopted and should include a rigorous formal evaluation to be effective.

Introduction

Increasing environmental uncertainty and competitive intensity makes innovation and innovation capacity become more and more important to organizational growth and survival(Hage, 1999). However, there is a serious question about the successfulness of organizational efforts to encourage innovation in the long term and in the view of organizational members' reaction(Armenakis and Bedeian, 1999). The factors which have been suggested as causes of the phenomena are as such: resistance to change, discrepancies of organizational characteristics and innovation, and mismatch between organizational targets and individual targets(Gilmore, Shea, & Useem, 1997; Damanpour, 1991; Lee & Kang, 2003).

In spite of the much amount of research, limited research of institutional pressure as a fundamental factor to decide organizational members' perceptivity to innovation has been carried out.

For the success of planned change, including organizational efforts to innovation, the stage of "unfreezing" necessarily involves reducing forces to maintain the status quo and motivating to engage in change activities, as Kurt Lewin points out(Cummings & Worley, 1993: 22-31). However, the source of knowledge that affects organizational members' receptivity and motivation to change is not only the information which management provides the members, contrary to the expectation of management. The extensive information offered by various institutional entities like professional consultants, the government, and media could also influence to organizational members. New institutionalism calls it as institutional pressure.

Although much of the research within new institutionalism deals with how institutional pressure results in similarity of organizational behaviors, some of the recent work has focused on how institutional pressure also affects organizational change and innovation. Abrahamson(1991) suggested that innovations in organization could be diffused like fads and fashions by pro-innovation bias and isomorphic mechanism. On the other hand, Meyer & Rowan(1977) assumed that organizations take a step towards decoupling informal practices from formally adopted policies when institutional demands and technical demands are inconsistent. Though the latter work makes sense both at the macro and the micro levels, micro level analysis has, so far, received relatively limited attention in academic research. Institutional pressure can affect not only the adoption of innovation program at organizational level, but also the receptivity of innovation programs and the performance at individual level. Also, the innovation programs adopted by institutional pressure and inconsistent with technical demands could be decoupled from actual practices at the micro level.

Therefore, through a field study of a large Korean quasi-government entity where a management innovation program is introduced top-down, we aim to empirically demonstrate the relationships among institutional pressure of innovation, participation of members, participants' stress on the innovation program, performance, and decoupling of performance from participation. Managerial implications will be suggested.

Discussion and Hypothesis

New institutionalism theorists identify three sorts of institutional pressure which bring institutional change to occur: normative, coercive, and mimetic pressure(Zucker, 1987; DiMaggio & Powell, 1983; Scott, 1995; Ruef & Scott, 1998). We define institutional pressure as social pressure exerted from the wider environment which forces an agent to act appropriately, legitimately, and 'reasonably'. In short, people take specific behaviors for granted and treat them conceptually correct when the behaviors are institutionalized. This concept includes normative pressure that an agent is subject to when professional individuals or groups develop norms and common practices, coercive-regulative- pressure that an agent is subject to when formal and/or managerial authority defines rules and ways of practices, and mimetic-cognitive-pressure when neighbored agents collectively and/or successfully employ norms and practices under complexity and uncertainty.

When their acts conform norms and practices which have acquired legitimacy, the acts are viewed as appropriately and taken for granted. They can obtain favorable confidence and avoid further inspection. Conversely, when they do not conform norms and common practices, they are to confront doubtful questions and unfavorable judgments. Additionally, individuals in organization tend to rarely boast of resistance or "express such attitudes in acts of dissent or

protest, without considering the potential negative consequences for themselves"(Piderit, 2000).

As a result, if there is high pressure for innovation or innovation programs in an organization, the program of change would be conceived as appropriately and accepted as conceptually correct. Because of the acceptance, the members would conform the change and reduce their resistance. That means institutional pressure can reduce the inevitable stress from change in behavior and mental model.

Researchers suggest that stress is positively increased when the job is forced, directly related to social support, and negatively related to performance(Sullivan & Bhagat, 1992). Based on this premise, the following hypotheses are developed:

Hypothesis 1: The stronger the institutional pressure of innovation, the greater the participation of organizational members in innovation program.

Hypothesis 2: The stronger the institutional pressure of innovation, the lower the stress of participants in innovation program.

Hypothesis 3: The lower the stress of participants in innovation program, the better the performance of innovation program(mediating effect).

Institutional pressure can change the perception and receptivity of organizational members on innovation programs and can have an impact even when the programs are forcefully adopted and do not meet the members' technical demands.

However, innovation programs that are adopted by institutional pressure but are inconsistent with technical demands tend to be decoupled from the practices of organizational members. In addition, the programs adopted by institutional pressure mainly purpose to obtain legitimacy and elude inspections about performance under the logic of confidence. That means they can evade demands of performance improvement and reduce efforts for performance. Based on this premise, the following hypotheses are developed:

Hypothesis 4: As a result of decoupling, the relationship between performance and participation will be not significant when the innovation program is adopted by institutional pressure but is inconsistent with technical demands.

Procedures for collecting data

The sample of this study was drawn from a large quasi-government entity in Korea. Complete survey data of 114 personnel was collected for the period of 2008 to 2009. The specific innovation program was e-learning programs on managerial innovation, which had no formal evaluation on participants or particular targets except the requirement of enrolling and taking the lectures through internet. The survey items for institutional pressure were developed. Institutional pressure for innovation from regulative, normative, and public opinion institutions are reported. The items on stress from innovation program were adapted from Korean job stress survey on innovation which are initially developed from job stress survey(Kim, Park, & Chon, 2004; Lee, 2006; Speilberg & Vagg, 1999). Participation rate and performance were reported by respondents. 7-point Likert scale on survey items was used to assess constructs.

Results

The result from regression analysis suggests that 1) institutional pressure has a positive correlation with participation of organizational members, 2) institutional pressure has a positive correlation with performance of innovation, 3) innovation stress mediates the relationship between institutional pressure and performance of innovation, and 4)

performance of innovation decouples from participation in management innovation program. Rigid organizational structure and personal innovative tendency have negative and positive correlation with performance of innovation, respectively. Table 1 demonstrates the results for hypothesis 1. Table 2 shows the results for hypothesis 2. Table 3 portrays the results for hypothesis 3 and the mediating effect of stress on innovation program(Baron & Kenny, 1986). Table 4 demonstrates the results for hypothesis 4. In addition, though the result shows that there is no significant relationship between personal innovativeness and participation, the relationship of personal innovativeness and performance was significant. That implies that howthorn effect can exist when performance evaluation of innovation programs which decouples from actual practices happens.

Table 1. Regression results on participation. N=114. * : p<.10, ** : p<.05, *** : p<.01. Participation: the hours really devoted to e-learning programs for innovation divided by the official hours necessary to pass. Gender: male=1, female=0. Position: manager(including above managers)=1, others=0. Education: high school=1, college=2, bachelor's degree=3, master's degree(including doctor's)=4.

Variables	Model 1		Model 2		Model 3	
	B	S.E.	B	S.E.	B	S.E.
(Constant)	.402	.141	.337***	.023	.424***	.138
Institutional Pressure			.056**	.023	.057**	.024
Gender	-.021	.064			-.003	.064
Position	-.049	.063			-.045	.062
Tenure(years)	-.003	.004			-.003	.004
Education	.002	.040			-.010	.040
Structural Rigidity	.024	.025			.032	.025
Personal Innovativeness	.016	.025			.008	.024
	$R^2=.042$ (Adj. $R^2=-.012$)		$R^2=.050$ (Adj. $R^2=.042$)		$R^2=.092$ (Adj. $R^2=.032$)	
	$F=.783$		$F=5.955$		$F=1.537$	

Table 2. Regression results on stress of innovation program. N=114. * : p<.10, ** : p<.05, *** : p<.01. Participation: the hours really devoted to e-learning programs for innovation divided by the official hours necessary to pass. Gender: male=1, female=0. Position: manager(including above managers)=1, others=0. Education: high school=1, college=2, bachelor's degree=3, master's degree(including doctor's)=4.

Variables	Model 1		Model 2		Model 3	
	B	S.E.	B	S.E.	B	S.E.
(Constant)	-1.052**	.491	-1.114**	.486	.470**	.511

Institutional Pressure			-.166**	.084		
Participation					.371	.338
Gender	.101	.225	.048	.224	.106	.226
Position	.172	.221	.160	.218	.184	.222
Tenure(years)	.001	.014	.001	.014	.001	.014
Education	.290**	.140	.324**	.140	.290**	.141
Structural Rigidity	.425***	.087	.402***	.087	.420***	.088
Personal Innovativeness	-.032	.086	-.008	.086	-.036	.087
	$R^2=.282$ (Adj. $R^2=.242$)		$R^2=.308$ (Adj. $R^2=.262$)		$R^2=.286$ (Adj. $R^2=.238$)	
	F=7.008		F=6.736		F=6.051	

Table 3. Regression results analyzing mediating effects of stress on innovation program. Participation: the hours really devoted to e-learning programs for innovation divided by the official hours necessary to pass. Gender: male=1, female=0. Position: manager(including above managers)=1, others=0. Education: high school=1, college=2, bachelor's degree=3, master's degree(including doctor's)=4.

Variables	Model 1 (Dependent Variable=Stress)		Model 2 (Dependent Variable=performance)		Model 3 (Dependent Variable=performance)	
	B	S.E.	B	S.E.	B	S.E.
(Constant)	-1.114**	0.486	4.084***	0.590	3.510***	0.550
Institutional Pressure	-0.166**	0.084	0.234**	0.102	0.148	0.094
Stress on innovation program					-0.515***	0.107
Gender	0.048	0.224	-0.439	0.272	-0.414*	0.247
Position	0.160	0.218	-0.293	0.265	-0.210	0.242
Tenure	0.001	0.014	0.024	0.017	0.025	0.015
Education	0.324**	0.140	-0.022	0.170	0.145	0.158
Structural Rigidity	0.402***	0.087	-0.462***	0.105	-0.255**	0.105

Personal innovativeness	-0.008	0.086	0.170	0.104	0.166*	0.095
	$R^2=.308$ (Adj. $R^2=.262$), $F=6.736$		$R^2=.287$ (Adj. $R^2=.239$), $F=6.084$		$R^2=.415$ (Adj. $R^2=.370$), $F=9.311$	

Table 4. Regression results on mediating effects of stress on innovation program. Participation: the hours really devoted to e-learning programs for innovation divided by the official hours necessary to pass. Gender: male=1, female=0. Position: manager(including above managers)=1, others=0. Education: high school=1, college=2, bachelor's degree=3, master's degree(including doctor's)=4.

	Model 1		Model 2		Model 3	
	B	S.E.	B	S.E.	B	S.E.
(Constant)	3.996	.601***	3.925***	.190	4.062 ***	.626
Participation			-.273	.455	-.162	.414
Gender	-.515*	.275			-.518*	.276
Position	-.310	.271			-.318	.272
Tenure(years)	.025	.017			.024	.017
Education	.026	.172			.027	.172
Structural Rrigidity	-.496***	.106			-.492***	.107
Personal Innovativeness	.204*	.105			.206*	.106
	$R^2=.251$ (Adj. $R^2=.209$) $F=5.973$		$R^2=.003$ (Adj. $R^2=-.006$) $F=.360$		$R^2=.252$ (Adj. $R^2=.203$) $F=5.101$	

Conclusions

The findings of this study provide empirical evidence that there is positive correlation between institutional pressure and performance of innovation program at the micro level. In addition, stress on innovation, as a mediator, can affect the correlation. Thus these results support our premise that institutional pressure can affect not only the adoption of innovation program at organizational level, but also the receptivity of innovation and performance improvement at individual level.

Also, the evidence on decoupling between participation and performance implicitly suggests that innovation programs should be discreetly adopted and should include a rigorous formal evaluation to be effective.

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Acknowledgements

We sincerely thank Prof. Yong Suk Jang for his valuable comments and help.