

School Climate Perception and Innovative Work Behaviour of School Teachers

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Abstract:

Innovative work behaviour at the individual level depends upon the perception of his/her own working conditions (Daly, 2009). In teaching context, the school climate factors may play a part in teachers' innovative behaviour. Addressing this issue, role of perceived school climate for innovative behaviour of teachers was studied. The sample for the study consisted of 400 school teachers from 28 schools of Kolkata and adjoining areas (West Bengal, India). They were administered the following measures: a) Innovative Work behaviour Scale (Jansen, 2000), b) School Climate Perception Scale (Johnson, Stevens and Zvoch, 2007). Correlation and Regression Analysis were used to examine the dynamics of relationship between school climate perception and innovative work behaviour. Results of regression analysis revealed that instructional innovation, student relation and collaboration were the significant predictors of innovative work behaviour. This study is a noteworthy contribution towards understanding the school climate factors that are important for innovative work behaviour of school teachers.

Keywords: Innovative Work behaviour, perceived school climate, secondary school teachers.

I. INTRODUCTION

Teachers serve as the extremely important facet of any society by educating the youth and imparting knowledge upon them in their most impressionable years. Conventionally, the teaching profession demand for subject matter experience and instructional competencies, but today there is a growing need to advance the levels of teacher's innovation competencies to assure that teachers are able to perform the role of innovator as well. Teachers' innovative work behaviour will increase their effectiveness in teaching and consequently be advantageous for the students in terms of acquiring knowledge. Innovative work behaviour is defined as the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group or the organization (Janssen, 2000). The scope of innovation ranges from the development and implementation of new ideas that have an impact on theories, practices or products across the whole organization, to smaller scale ideas that are related to improvements in daily work processes and work designs (Axtell, Holman, Unsworth, Wall, & Waterson, 2000). Teachers primarily contribute to small scale innovations in the domain of their work roles and initiate the process of innovation in their teaching. However, individual level innovative work behaviour of teachers depends upon the perception of his/her own working conditions. The present study aims to examine the role of school climate perception in predicting innovative work behaviour of school teachers.

Theoretical Background:

I. Innovative Work Behaviour of Teachers:

Individuals' innovative behaviours in the workplace include actions such as seeking out new ideas,

championing ideas at work, and planning for the implementation of ideas (Scott & Bruce, 1994). In order to be considered innovative, ideas have to be (i) new in the particular context of individuals who develop or use the innovation. They have to be (ii) applicable and adequate in the social and organizational context that is affected by the innovation. And they have to be (iii) beneficial for this social context in that they are useful for accomplishing a certain task, for solving a pressing problem, for satisfying someone's needs, or for acting on available resources (Farr & Ford, 1990; King, 1992; West & Farr, 1990).

From models of creativity and innovation (Amabile, 1988; Kanter, 1988; West, 2002) it can be derived that innovative behavior involve four broad innovation tasks (Kanter, 1988) which can be divided into a creative component and an implementation component: The creative component encompasses the exploration of opportunities for innovation (also referred to as problem recognition) and the generation of innovative ideas. The implementation component encompasses the promotion (or introduction and dissemination) of these ideas and their realization (or application) in organizational practice. A crucial characteristic of innovation processes is that its constituent innovation tasks are interdependent, that is, their accomplishment may overlap and occur simultaneously and repeatedly (Lubart, 2001). Furthermore, although these innovation tasks partly build on each other, they do not automatically follow a linear sequence and are rather iteratively connected (Dorenbosch, Van Engen, & Verhagen, 2005; Messmann & Mulder, 2012). In educational settings innovations and innovative work behaviour are an important issue. In context of teaching, innovations are significant changes and improvements of the learning environment for

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betterment of the students. Innovative teaching is the process leading to creative learning, the implementation of new methods, tools, technology and contents which could benefit learners and their creative potential (Ferrari, Cachia and Punie, 2009). Although there is recognition of the crucial role of teachers in the development of innovations, it has not yet been investigated how teachers are involved in innovation related work behaviours and how their active contributions can be encouraged and fostered (Messmann, Mulder & Gruber, 2010). For example an “innovative” teacher may have an idea, how (s)he can motivate the students by involving them into realistic work situations and make them grasp the subject matter. However, in order to implement this idea (s)he needs to be engaged in innovation related activities like introduce new plans to colleagues, seek help from authorities, acquire information from other schools, seek resource support from school management etc. The teacher has to prove the success of the idea by showing constructive results, that is, the innovation outcome.

II. Perception of School Climate and Innovation:

Every school setting has a set of psychological and institutional attributes that give it a distinctive interpersonal climate (Kuperminc, Leadbeater, Emmons, & Blatt, 1997). Psychological attributes include levels of trust, cooperation, and openness among staff, teachers, and students; institutional attributes include teaching practices, level of collaboration, and staff, student, and parent expectations (Bulach, Malone, & Castleman, 1995; Way, Reddy, & Rhodes, 2007). School Climate perception of a teacher is referred to as teacher's subjective experience in school and reflects norms, goals, values, interpersonal relationships, teaching learning practices and organizational structures (Brookover, 1978; Cohen, 2006; Johnson, Stevens & Zvoch, 2007). Individuals within an organization are essential for the generation of innovations. However, in order for an organization to capitalize on its innovative capacity, work climates that support risk taking are equally necessary components (Calatone, Garcia & Droge, 2003; Hage, 1999; Nohria & Gulati, 1996). Positive climate has been associated with opportunities for collaboration and input in adapting to non-routine challenges (Hage, 1999). Work climates that provide for more flexibility and encourage participation in decision-making by members of organization have been associated with generation of new ideas (Daly, 2009). Therefore for teacher's innovative work behavior suitable school climate is a crucial factor.

II. METHOD

Participants:

The participants in this study were secondary and higher secondary school teachers, randomly selected from 28 different private (n=214) and government (n=186) schools of Kolkata and adjoining areas (West Bengal, India). Out of 485 school teachers, 400 were willing to participate in the study, reflecting approximately 82% response rate. The inclusion criteria of the study were full time secondary and higher secondary school teachers with minimum teaching experience 3 years. Part time school teachers and teachers

teaching non-scholastic subjects (like physical education, music etc.) were excluded from the study. The sample comprised of 155 male teachers (39%) and 245 female teachers (61%). The teachers were middle aged (Mean = 40.03 yrs, S.D. = 9.38) and experienced (Mean = 12.77 yrs, S.D. = 8.43).

Measures:

The following measures were used for the present study:

- General Information Schedule* with socio-demographic information (age, gender, school type, teaching experience etc).
- Innovative Work Behavior (IWB) Scale*: This was a 9-item five-point likert type (Always to Never) scale originally developed by Janssen (2000). This scale consists of 3 components: idea generation, idea promotion and idea implementation. The reliability of the scale in this study is measured with Cronbach's Alpha, $\alpha = 0.90$.
- School Climate Perception (SC)*: Revised School-Level Environment Questionnaire (Revised SLEQ), the 21-item five-point likert type (Strongly Agree to Strongly Disagree) questionnaire, developed by Johnson, Stevens and Zvoch (2007), was used for measuring school climate perception. This scale consists of 5 domains - Collaboration, decision making, instructional innovation, student relations and school resources. The reliability of the scale in this study is measured with Cronbach's Alpha, $\alpha = 0.86$.

Procedure:

Initially, list of schools of Kolkata (West Bengal, India) was collected from District Inspectorate Offices of Secondary Education, based upon the requirements of the study. The principals of 35 schools were approached for permission to collect the data from their teachers, out of which 28 schools agreed for this study to be conducted. The informed consent was taken from the teachers after rapport. Data were randomly collected from 400 secondary school teachers by administering the above-mentioned measures. Statistical analysis of the data was done using SPSS software.

III. RESULTS

In Table 1, descriptive Statistics (Means & Standard Deviations) of the study variables are reported. Table 2 shows the correlation of innovative work behavior with the dimensions of perceived school climate. It reveals that all the dimensions of school climate were positively and significantly correlated with innovative work behaviour of teachers. Collaboration and instruction innovation were more strongly related to innovative work behaviour.

TABLE 1: Means and Standard Deviation of the variables

Variables	Mean	S.D.
1. Collaboration	21.70	3.78
2. Student Relation	15.30	2.75
3. School Resources	12.48	3.10
4. Decision Making	9.24	2.12
5. Instructional Innovation	10.11	2.61
6. Innovative Work Behaviour	30.74	7.50

N = 400

TABLE 2: Correlation between Perceived School Climate dimensions & Innovative Work Behaviour

Dimensions of Perceived School Climate	Innovative Work Behaviour
1. Collaboration	.48**
2. Student Relation	.40**
3. School Resources	.31**
4. Decision Making	.38**
5. Instructional Innovation	.67**

N=400; * p < .05; ** p < .01

In order to determine which factors of perceived school climate most significantly predict innovative work behaviour of teachers stepwise regression analysis was performed. It can be seen from the Table 3 that 44.50% of the variance in innovative work behaviour is explained by instructional innovation (F value=321.30, p<.001). Instructional innovation and student relations together produce 46.10% of the variance in innovative work behaviour with F value=171.84, p<.001. 47% of the variance in innovative work behaviour is explained by instructional innovation, student relation and collaboration (F value=118.74, p<.001). This suggests that instructional innovation, student relation and collaboration are the predictors of innovative work behaviour.

TABLE 3: Stepwise Regression Analysis with Innovative Work Behaviour as dependent variable and dimensions of Perceived School dimensions as independent variable

Steps	Variables	R ²	Adjusted R ²	Δ R ²	F	β
1	Instructional Innovation	.447***	.445	.447	F(1,398) =321.30***	.67***
2	Instructional Innovation	.464***	.461	.017	F(2,397) =171.84***	.61***
	Student Relation					.15***
3	Instructional Innovation	.474**	.470	.010	F(3,396) =118.74***	.55***
	Student Relation					.11**
	Collaboration					.12**

N=400; *** p < .001, ** p < .01

IV. DISCUSSION

Present study revealed that school climate which supports innovation in teaching instructions, healthy teacher-student relation and collaborative culture, fosters innovative work behaviour among teachers. Lichtman (2007) found that climate factors that enhance feelings of opportunities for personal growth and development seem to be the most influential. A sustainable, positive school climate fosters collaborative work environments and thus gives autonomy in part of teachers. When teachers perceive their school climate as positive, they will be more involved in their teaching job and try to address the different needs and requirements of

students. Chou, Shen, Hsiao & Chen (2010) thus suggested that teacher’s trust and identification with schools influence their innovative behaviour which would benefit the schools, increase the use of multiple instructional methods, and develop students’ multiple wisdom and creativity. Structural impediments to teacher autonomy and creativity often weaken the sense of collegiality and trust among teachers and also increase disillusionment among them (Ingersoll, 1996; Jalongo & Isenberg, 1995). Teachers’ innovative behaviour will therefore enhance if they perceive that their school is encouraging and rewarding them for their novel ways of teaching. Instruction innovation dimension of the school climate thus emerged as the most important for innovative work behaviour.

Further, innovation is not possible if teachers’ don’t get support from the other members of the school organization. Support from other teachers, principal and other staffs will lead to a positive environment in school and boost teachers’ innovativeness. Teachers’ perceptions of principal support have been linked to teacher commitment, collegiality, and retention (Singh & Billingsley, 1998), and conversely, lack of such support may render teachers vulnerable to job-related stress and burnout (Farber, 1984; Westman & Etzion, 1999). Teachers who perceive their principals as more supportive also report a greater willingness to participate in decision-making regarding school policies (Smylie, 1992), and enthusiasm for such participation is nurtured when teachers view their input as having an effect (Pankake & Moller, 2007). Collaboration between the members of school is therefore necessary for innovation to occur.

Noteworthy finding of this study is that teachers’ perceive healthy relationship with students is important for their innovative activity in class. The structure or organization of a school community greatly affects the way students and teachers feel about the time they spend at school. Hamre and Pianta (2001) explained that an emotionally and socially positive school climate contributes to the development of students’ self-confidence, teachers’ belief that they can be effective in their jobs, and an atmosphere of cordiality in student-teacher relationships. Student’s unwillingness to learn and respond in the class could be an inhibiting factor for teachers’ innovativeness. Teachers’ propensity to innovate will enhance if they perceive that students are respectful and responding well to the new teaching techniques.

Further, in this study it was found that decision making and school resources were significantly related to innovative work behaviour but were not predictor of the same. From this finding it can be said that school’s decision making and resources, though are related to innovative activity, teachers’ don’t perceive them as contributing factor for bringing innovation in teaching. It may be due to the reason that these two factors are externally controlled and depends a lot upon the administration of the schools. Hence, scarcity of resources and rigidity in decision making may affect individual level innovative work behaviour of teachers but not hinder in their pursuit of innovativeness.

V. CONCLUSION

In today’s world of rapid changes and educational reforms taking place, innovative work behaviour is a thrust area

which needs to be enhanced among school teachers. The present study implies that school climate perception is the crucial determiner of innovative work behaviour of school teachers.

VI. REFERENCES

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