GENDER DIFFERENCES IN BOYS' AND GIRLS' PERCEPTION OF CLASSROOM ENVIRONMENT OF GOVERNMENT AND PRIVATE SCHOOLS OF CHANDIGARH

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Abstract

This study was based on a survey of secondary school students' perception of their classroom environment. Students of both the gender constitute the population of this study. Sample of the study was 925 students i.e. 453 Government school students (223 males and 230 females) and 472 private school students (241 males and 231 females) of 9th grade selected randomly from 10 private and 10 Government schools located in Chandigarh. Classroom environment Scale developed by Moos and Trickett (1987) was used for data collection. Descriptive statistics and t-test with $P < 0.05$ level of significance were used for data analysis.

Introduction

The classroom is a learning environment where interactions occur among students and teachers and learning takes place (Talton & Simpson, 1987). The quality of the classroom environment in schools has a considerable influence on pupils learning. That is, they learn more when they perceive the classroom atmosphere more positively. The basic purpose of anyeducational institution should be to provide an environment favorable to learning as reflected in its milieu or ethos or tone or culture. The environment is both physical and mental. The Secondary Education Commission (1952-53) states that the first concern of the school should be to provide for its pupils a rich, pleasant and stimulating environment which will evoke their manifold interests and make life a joyful experience. A positive learning environment can shape students' outcomes in cognitive, motivational, affective, and behavioral domains (Fraser & Fisher, 1982).

Wagner (2002) investigated gender differences in students' mathematics achievement and perceptions of the classroom environment in single-sex mathematics classrooms in one urban, ethnically diverse, middle school. Ethnic and achievement-level differences were also explored. Several significant gender effects were found in students' perceptions of the classroom environment. Davis (2008) investigated the perceptions of the classroom learning environment as seen byAfricanAmerican students attending schools in rural southeastern United States. An analysis ofvariance was performed which compared the mean scores of students in relation to school model attended, gender, age, and interaction of each across the three dimension of relationship, personal growth/goal orientation, and systemmaintenance and change. The results of the ANOVAindicted that with the exception of gender and personal

growth/goal orientation there is no significant difference when it comes to

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students perceptions. Opolot-Okurut (2010) studied secondary students' perceptions of mathematics classroom learning environment and their associations with their motivation towards mathematics. The results indicated a statisticallysignificant difference in student perceptions between different schooltypes. Student perceptions on some scales were significantlyassociated with student motivation. Swindell (2010) in his study, differences in the middle school classroom examining learning environments of boys and girls from different socioeconomic backgrounds found that girls do not like science and that boys are lovers of science and this could be because of their different perceptions oftheir learning environment. Socioeconomic status has not been having an association with perceived learning environments. Prince (2012) examined the relationship of gender, parental education, aspirations, and mathematics achievement ofstudents from three ruralpublic high schools in the Southeast region of the United States. Amultiple regression revealed that parental education level and gender did not predict mathematics achievement while the number of books in the home did.

Murugan and Rajoo (2013) studied perceptions of students' studying in Sipitang, Sabah, Malaysia with regard to mathematics classroom environment and mathematics achievement. Findings showed that students had a moderate perception of their mathematics classroomenvironment. Mathematics achievement was low, with female students achieving better than males in their mathematics assessment. There was no significant difference in perception of mathematic learning environment based on gender. No significant correlations were found between mathematics classroom learning environment and mathematics achievement.

Design of Study

A systematic procedure to collect data, which helps to test hypotheses of the study under investigation, was adopted. The method was essentially descriptive survey method.

Sample

In the present study, 925, 9th class students i.e. 453 government school students and 472 private school students selected randomly from 10 private and 10 government schools located in Chandigarh. Two -stage random sampling technique was employed.

Hypotheses

There exists no significant difference in the perception of classroom environment of ninth class male and female adolescents studying in Government schools.

There exists no significant difference in the perception of classroom environment of ninth class male and female adolescents studying in private schools.

Analysis and interpretation of data

Descriptive statistics and t-test with $P < 0.05$ level of significance were used for data analysis.

Table 1

Mean Differentials in the Perception of Classroom Environment of Ninth Class Male and Female Adolescents Studying in Government Schools

Dimensions of Classroom Environment	M (Male) (N=223)	M (Female) (N=230)	SD (Male)	SD (Female)	t value	Level of Significance
Involvement	5.52	5.70	1.59	1.73	1.14	NS
Affiliation	5.94	6.01	1.75	1.70	.438	NS
Teacher support	5.25	5.66	1.80	1.70	2.48	0.05
Task orientation	5.16	5.54	1.60	1.63	2.47	0.05
Competition	5.91	6.46	1.74	1.63	3.44	0.01
Order and organization	5.39	5.81	1.68	1.89	2.47	0.05
Rule clarity	6.30	6.62	1.87	1.58	1.94	NS
Teacher control	4.98	5.52	1.72	1.79	3.41	0.01
Innovation	5.29	5.53	1.77	1.77	1.46	NS
Classroom environment (total)	49.78	52.91	8.59	9.02	3.77	0.01

Results entered in Table 1 show that the mean differentials between the perceptions of male and female adolescents with regard to competition, teacher controldimensions ofclassroom environment and class room environment (total) were significant at .01 level of significance and with regard to teacher support, task orientation, order and organization dimensions of classroom environment were significant at .05 level of significance, whereas the mean differentials between male and female adolescents with regard to involvement, affiliation, rule clarity, and innovation dimensionsof classroom environment were not significant at any level of significance.

The results show that the female adolescents studying in Government schools scored higher than male adolescents in teacher support dimension of classroom environment. This suggests that female adolescents of Government schools are supported and trusted by teachers more than male adolescents. Further, the female adolescents have higher scores on task orientation dimension of classroom environment than male adolescents. This suggests that female students lay more emphasis on completing planned activities in the classroom than male students.

The results reported in the Table 1 also reveal that female adolescents scored higher in competition dimension of classroom environment than male adolescents studying in Government schools. This indicates that female adolescents compete with each other for grades and recognition, and work hard to achieve good grades more than the male adolescents. Further, higher mean score of female adolescents in order and organization dimension of classroom environment than male adolescents indicates that female adolescents behave in an orderly and polite manner and organize assignments more effectively than their male counterparts. Higher mean score of female adolescents than male Government school adolescents in teacher control dimension of classroom environment suggests that teachers are more strict with female students than male students.

However, the mean differentials between male and female adolescents in involvement, affiliation, rule clarityand innovation dimensions of classroom environment were not significant. This suggests that both male and female adolescents are equally involved and attentive in classroom activities. They equally enjoy working together and follow rules in the classrooms. Since the mean score of total classroom environment of female adolescents was higher than the mean score of male adolescents, it suggests that female adolescents studying in Government schools perceive their classroom environment more positively than their male counterparts.

On the basis of above discussion of results, it can be concluded that female adolescents are more supported and trusted by teachers, complete beforehand activities, work harder to achieve good grades and are more organized than male adolescents. Further female adolescents think that with them teachers are more strict in the classroom than their male counterparts. However, male and female adolescents don't differ with regard to their perception of involvement, affiliation, rule clarity and innovation dimensions of classroom environment.

Hence, Hypothesis 1, namely, "There exits no significant difference in the perception of class room environment of ninth class male and female adolescents studying in government schools" has been partially accepted. These findings are in line with the findings of Pitchford (2013); Wagner (2002); Waxman and Huang (1998) who have reported significant gender

effects in students' perceptions of the classroom environment but are contradictory to the findings by Murugan and Rajoo (2013) who have reported no significant difference in perception of mathematics learning environment based on gender.

Table 2

Mean Differentials in the Perception of Classroom Environment of Ninth Class Male and Female Adolescents Studying in Private Schools

Dimensions of Classroom Environment	M1 (N=241)	M2 (N=231)	SD1	SD2	t -value	Level of Significance
Involvement	5.68	5.76	1.69	1.75	.487	NS
Affiliation	6.26	6.41	1.81	1.65	.935	NS
Teacher support	5.52	5.74	1.78	1.63	1.420	NS
Task orientation	5.72	5.96	1.77	1.70	1.49	NS
Competition	6.49	6.71	1.62	1.86	1.33	NS
Order and organization	5.59	5.84	1.59	1.77	1.58	NS
Rule clarity	6.24	6.53	1.72	1.67	1.88	NS
Teacher control	5.68	5.89	1.66	1.56	1.41	NS
Innovation	5.79	5.52	1.90	1.68	1.62	NS
Classroom environment (total)	52.97	54.36	8.65	7.52	1.86	NS

Results entered in Table 2 show that the mean differentials between male and female adolescents with regard to different dimensions of classroom environment i.e. involvement, affiliation, teacher support, task orientation, competition, order and organization, rule clarity, teacher control, innovation, and class room environment (total) were statistically insignificant. This indicates that the perception of male and female adolescents studying in private schools does not differ significantlywith regard to these dimensions of classroom environment because in private schools both male and female adolescents get identical opportunities as far as classroom activities are concerned. Thus, they perceive their classroom environment equally. Hence, Hypothesis 2, namely, "There exists no significant difference in the perception of class room environment of ninth class male and female adolescents studying in private schools" is accepted. The results reported by Owens and Straton (1980) and Swindell (2010) do not support the present findings. They have reported significant difference in the perception of male and female adolescents with regard to classroom environment.

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