

THE RELATIONSHIP BETWEEN CLASSROOM CLIMATE AND LEARNING SATISFACTION ON SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study aimed to investigate the perception of senior high school students for the relationship between classroom climate and learning satisfaction on multi-level model (multilevel model) methods to explore effect of two levels variables on students' learning satisfaction. The questionnaire scale Compiled and revised from the scale of classroom climate and learning satisfaction, and processed a two-stage survey, there are 646 effective samples from 20 high school classes. From this study, we can find that individual level variables of classroom climate and context variables of the average classroom climate, has a positive impact on the effect of learning satisfaction. Class levels of teacher gender on learning satisfaction also have a significant influence, but cross-level interaction effect is not significant.

Keywords: Classroom climate, learning satisfaction, high school

MOTIVATION AND PURPOSE

Classroom management is intended to provide students with more opportunities to learn, teachers create learning situations, students should be able to carry out the maximum potential, which allows students to develop appropriate behavior patterns, so the classroom is not only a place of individual students, also a groups living space. Classroom is a complete and independent learning space, other than the teacher (individual adult), students can perform many different activities. Because of the great heterogeneity of students, the teacher often needs to handle complex and diverse events, coupled with frequent interaction between students, often have unforeseen eventuality (Prochnow & Macfarlane, 2011). Therefore, teachers must deal with unexpected events and the ability to control student behavior, teachers can take effective classroom management strategies, and the student will be substantially reduced impropriety appearance in the classroom or after-school, or misconduct probability.

If the environment of student's classroom is friendly, harmonious, humane, and supported, then the students will have a high motivation to learn. Students who can believe scientific facts, creativity, therefore they owned individual learning perspectives and satisfaction is one of the important goals in science education (Bell & Lederman, 2003; Nuangchalerm, 2009). And if they can enhance students' interest in science education and cultivate positive attitude towards learning, to stimulate students' creativity, classroom environment in which feelings and classroom climate, and learning skills development is also closely involved (Marx et al., 2004) From the viewpoint of group dynamics, students' learning experience and will be subject to the classroom teacher efficacy impact individual interaction, group dynamics within the context of the class to make students feel happy and loved, this atmosphere is the classroom climate, classroom climate and student learning outcomes or implementation performance are closely associated (Gascoigne, 2012; Schmuck & Schmuck, 2001).

Effective classroom management and positive classroom climate construct is essential knowledge teachers and strategies. Classroom climate is a fusion of all classmate members (including teachers and students), through teaching, learning, live, motivation ... and other interactive process interwoven the characteristics of the class, which in turn affect the characteristics of all members of the class, and then emit a specific emotions. Classmate climate will not only affect student learning, will also affect everyone in the classmate interaction and emotion, organizational support and cultural patterns will affect members of the feedback interactions with members of the organization, thereby affecting the personal beliefs and learning (Robins, 2003). If the teacher is teaching and classroom management want to get a student identification, parents certainly must allow students to have a high learning satisfaction, if teachers create a classroom climate is positive, then the students' learning satisfaction would be higher, in addition to more good learning effect, behavior will be better. This study has two research objectives: (1) Understanding of high school students and their perception of the classroom climate relationship between learning satisfaction. (2) To investigate the characteristics of the classmate attribute variables (sex teacher, teachers with class time, teachers in which school size) and individual student-level variables (student perceived classroom climate, student sex, student grades) on student learning situations satisfaction.

LITERATURE REVIEW

Many novice teachers or junior school teachers often lack sufficient knowledge of classroom management force, or an efficient method of classroom management is often seen in class general management issues (Hammerness, 2003; Ralph, 2004; Ikoya, 2007). Therefore, effective classroom management is to create a learning environment for teaching and warming prior conditions, showing the importance of classroom management. The novice or junior teachers are facing the problem of classroom management, classroom discipline from a lack of management, inefficient coordination and control of the classroom, guiding students' abilities, and lack with parents, students communication skills (Badmus, 2001; Mayer, 2002). Mayer (2002) and Hammerness (2003) pointed out that many teachers lack the understanding of early human ecology of different classroom capacity, lack of sensitivity, insight is not enough, and thus will meet in the classroom situation mistaken for serious problems, excessive stress; relatively certain teachers did not see it as the problem to be addressed, and ignore such problems, leading to a serious deterioration in students' questions. When the class had more behavioral problems or conflicts event occurs, the students feel the classroom climate will naturally be more negative. Mayer (2002) and Hammerness (2003) pointed out that many teachers lack of early man's ability to adapt to different ecological classroom, lack of sensitivity, insight, hence will encounter in the classroom situation, mistaken for a serious problem, so overwrought. Some teachers are relatively ignored but not be dealt with and ignore such problems, leading to students' problems worse. When the class has more students with behavioral problems or more conflict event occurs, the student will feel the climate of the class is more negative. Joo, Lim and Park (2011) investigated 379 engaged in digitization (e-learning) learners to understand organizational support, learner mobility and the relationship between learning satisfaction. Structural equation model verification-related indicators, the study found organizational support and learner mobility for learners' satisfaction has a positive and significant impact, and organizational support to the sentiment that belongs to one of the organizational climate of emotional perception. Song and Kang (2012) that the information and communication technology (ICT) attitude assessment, because the students in the class is nested on the ICT attitudes or satisfaction, except by the personal property, population change term effects, will also be classmate climate and

characteristics of the school, in which case, if the number of groups overall level enough, using hierarchical linear regression model would be more appropriate than the traditional cut, because the hierarchical linear model can for more useful information can be further analyzed predictors of the outcome variable cross-level interaction effect.

For science teachers concerns, they must be able to trigger the students to learn, not to reduce opportunities for student learning, teachers should provide a supportive environment to encourage students to interact with peers, guiding students to accept the challenge, triggering an open mind and the courage them have to learn new knowledge. For students feel satisfied with the situation, in addition to classroom observation, the easiest way is to implement student learning satisfaction survey (Nuangchalem, 2009). For the classmate climate feelings situation will vary due to the student's personal and classroom climate and contextual effects discussion, because individual students fill in answers by the impact of research on education students from the same class, will affect the student outcome variable (student achievement, self-concept, involvement), which changes because it contains individual students (class one independent variables) and class, teacher or school group variable (class two independent variables), which uses multi-level model (multilevel models) analysis is more appropriate (Marsh, Ludyke, Morin, Abduljabbar, & Koller, 2012). In educational research, such research methods conceptual schema (school/teacher effectiveness research, school/classroom climate research, school/classroom context variables studied), has been widely applied to organizations, families, sociology and medical fields, also discussed influence results between the individual level and group level variables (Bliese, Chan, & Ployhart, 2007 ; Shin & Raudenbush, 2010).

Gascoigne (2012) adopted the "Connected Classroom Climate Inventory" (CCCI) Scale for the classmate climate, the classmate climate was as explained variables, and students to implement performance as the dependent variable, explore the perception of classroom climate and implement performance between the relevant circumstances on high school students. There are 18 questions of the study found that students perceived a positive classroom climate, support, students have a better implementation of the performance behavior.

RESEARCH DESIGN AND IMPLEMENTATION

The questionnaires survey was used in this study, using stratified random sampling method, survey Kaohsiung in Taiwan high school first grade, second grade students were taken ten schools twenty students in the class, the effective sample size of 646 copies

The questionnaire survey was used in this study, using stratified random sampling method. The examinees were selected from first and second grade students of ten schools twenty students of high school in Kaohsiung. There are 646 effective example samples in this survey. The result of gender, 51.5% (333) of respondents are female, male 48.5% (313); 43.7% (282) are first grade, 56.3% (364) are second grade.

Amendments of "classroom climate scale" and "Learning Satisfaction Scale" are made by the researchers, completed questionnaires to be checked by two scholar experts and two high school teachers, in order to establish expert validity of this questionnaire survey. There are 123 effective samples for pilot test to increase the reliability and validity of tests, in order to delete the items of "classroom climate scales" and "Learning Satisfaction Scale", depended on value of Critical reliability (CR) and the total score associated with questions as item analysis. Then using the Components analysis (CA), and varimax method as orthogonal rotation process factor analysis, "classroom climate Scale" can be extracted five factors: goal-

oriented, classmate rules set, love pleasure, democratic communication and solidarity, five of the cumulative variance explained number is 77.7% and the internal consistency α coefficients range from .767 to .909, total scale α coefficient is equal to .928. From the "Learning Satisfaction Scale" to extract four factors: the satisfaction of instructors teaching ability, the satisfaction of the activity participation, the satisfaction of teacher managing the regular classroom capabilities, the satisfaction of peer interaction in the classroom, four factors explain the accumulation of variance is 79.5%, the internal consistency α coefficients range from .818 to .935, total scale α coefficient is equal to .946.

Individual-level independent variables, the student gender (boys and girls), student grades (first grade, second grade); in the class or the teacher explained the overall level variables, have teacher gender (male, female), guidance counselor time (less than one year, more than one year), the size of the school teachers (large schools are over 45 classes, small schools is under 44 classes).

RESULT AND DISCUSSION

The Relation between Classroom Climate and Learning Satisfaction

Table 1. The coefficient index of relation between classroom climate and learning satisfaction (N=646)

<i>Learning Satisfaction</i>	<i>Teaching Ability</i>	<i>Regular Management</i>	<i>Activity Participation</i>	<i>Peer Interaction</i>	<i>Learning Satisfaction</i>
<i>Classroom climate</i>					
Goal-Oriented	.371***	.293***	.469***	.440***	.469***
Class Rules Set	.202***	.295***	.392***	.331***	.378***
Love Pleasure	.334***	.318***	.483***	.448***	.476***
Democratic Communication	.397***	.368***	.513***	.514***	.522***
Solidarity	.372***	.347***	.579***	.540***	.557***
Classroom Climate	.402***	.390***	.586***	.546***	.578***

*** $p < .001$

From Table 1, we can find out that all dimensions of classroom climate, all dimensions of learning satisfaction, and satisfaction of all learning are significant positive correlation. The correlation coefficient between .390 to .586, and the correlation coefficient of classroom climate and overall learning satisfaction is .578 ($p < .001$), it can be said that the better classmate climate will increase satisfaction of learning, classroom climate can be explained by the satisfaction of learning is 33.4% of the variance (coefficient of determination).

The Effects of Classroom Climate and Related Variables on Learning Satisfaction

To explore the classroom climate individual level variables, and class context entry / interpretation on variables Multi-level model, find the effects of learning satisfaction.

Model A (null model)

The level 1 of model :

$$\text{Learning satisfaction } ij = \beta_{0j} + \gamma_{ij}$$

The level2 of model :

$$\beta_{0j} = \gamma_{00} + \mu_{0j}$$

Intercept parameters of fixed effects in null model : $\gamma_{00}=58.89$ ($p<.001$), it represents estimates of γ_{00} is significant and equal to 0. Due to the individual is not included in any level or all levels of explanation variables, $\gamma_{00}=58.89$ are the average value of the outcome variable (learning satisfaction) of all students.

Two levels of random effects (variance estimate), the level 1 is the variance parameter changes within the class groups σ^2 , the variation between the estimated value of the class parameter γ_{00} , it can be learned from Table 2; $\gamma_{00} = 31.02$, $\chi^2(19)=243.32$, $p<.001$, expressed the satisfaction scores of student learning “between classes” to represent significant differences. The internal correlation coefficient of null model is. According to Cohen (1988) proposed standard, when ICC is greater than 13.8%, which means that the groups have high relation. Expressed the total variance of satisfaction of student learning has 26.1% of the variation is caused between classes, can be explained by the variation in the classroom is 73.9%, to explore the students' learning satisfaction, you can not only use traditional regression methods, must be considered to the differences between classes.

The Effects of Individual-Level Variables to Explain the Learning Satisfaction

Model B: Random coefficient regression model

When we put graders slope estimate value of learning satisfaction to be the variation coefficient of cross-group, the model cannot be estimated, so the slope equation of the level 2 changed from random effects to fixed effects, then all parameters of the model can be successfully estimated. The measured variables of the level 1 are measured by group mean centering, the context variables of the level 2 are measured by grand mean centering, so that will not be much change in the intercept parameters.

Model of the level 1

Learning satisfaction $_{ij} = \beta_{0j} + \beta_{1j}$ (Student gender $_{ij}$) + β_{2j} (Student gender $_{ij}$) + β_{3j} (Class gender $_{ij}$) + γ_{ij}

Model of the level 2

$$\beta_{1j} = \gamma_{10} + \mu_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{3j} = \gamma_{30} + \mu_{3j}$$

In the three fixed effect variables, graders, classroom climate to effects of learning satisfaction are significant, $\gamma_{20}=14.89$ ($p<.05$), learning satisfaction of first grade student (standard numeric code 1) significantly lower than the second grade student (standard numeric code 0), $\gamma_{30}=0.56$ ($p<.001$), parameter estimation is positive, which means that there is a positive classroom climate significantly affect learning satisfaction, classroom climate when the measured value increases 1 unit, students will increase 0.56 units of satisfaction.

The random effects of level 2, $\tau_{00}=32.30$ ($p<.001$), represent it is significant, which means that the interpretation of individual-level variables in learning satisfaction, the “learning satisfaction” between classes have significant difference. $\tau_{33}=0.12$ ($p<.001$), and represent significant, which means that classroom climate of students' perception has significant difference of classes on learning satisfaction.

Compared with the null model, the variance (σ^2) of error (ϵ_{ij}) of level 1 dropped from 87.74 to 52.60, the reducing percentage of variance: $(87.74-52.60) / 87.74 = 40.1\%$, which means that

it included student genders, student grades, the classroom climate that can explain the learning satisfaction 40.1% of the variance, the percentage of unexplained variance is 50.9%.

The Effects between Explanatory Variables of the Overall Level Items and Learning Satisfaction

Model C: the regression model of average as the results

Model of the level 1

Learning satisfaction $ij = \beta_{0j} + \gamma_{ij}$

Model of the level 2

$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{School size } j) + \gamma_{02}(\text{Teacher gender } j) + \gamma_{03}(\text{Teacher with class time } j)$

When the regression model in the intercept as results, the overall level variables are achieve significant levels: teacher Gender, teachers with class time, class average class atmosphere, $\gamma_{02} = -4.63$ ($p < .05$), male teachers (standard values coded as 1) class learning satisfaction significantly lower than the class of female teachers (standard values coded as 0); $\gamma_{03} = -3.91$ ($p < .05$), the time of the mentor with class is under a year (standard value coded as 1), its learning satisfactions significantly lower than the time of the mentor with class over 1 year (standard values coded as 0), $\gamma_{04} = 0.53$ ($p < .01$), the average classroom climate of classes has a significantly positive impact on learning satisfaction when average classroom climate of each class increase one unit, the class learning satisfaction can increase 0.53 units.

Random effects of level 2, $\tau_{00} = 16.32$ ($p < .001$), represent to achieve significant level, which means that the overall level of the control variables explain the impact of learning satisfaction, the "learning satisfaction" between classes still has significant differences. It means that variables between classes learning satisfaction, other variables are present. ICC = $16.32 / (16.32 + 87.76) = 15.7\%$, compared with the null model, correlation coefficient of within group decreased from .261 to .157, explanation variables of the overall level can explain the variation in class learning satisfaction is $(31.02 - 16.32) / 31.02 = 47.4\%$.

The Effects of Relationship Variables of Teacher and Student to Learning Satisfaction - Model D

Model of level 1:

Learning satisfaction $ij = \beta_{0j} + \beta_{1j}(\text{Student gender } ij) + \beta_{2j}(\text{Student gender } ij) + \beta_{3j}(\text{Classroom climate } ij) + \gamma_{ij}$

Model of level 2

$$\beta_{1j} = \gamma_{10} + \mu_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{3j} = \gamma_{30} + \mu_{3j}$$

Explanation variables of class-level variables and students affect learning satisfaction represent significant: teacher genders, average classroom climate, classroom climate. $\gamma_{02} = 14.07$ ($p < .05$), Male teachers (standard values coded as 1) class learning satisfaction is significantly lower than female teachers class learning satisfaction (standard values coded as 0). $\gamma_{04} = 0.47$ ($p < .01$), it represents the average classroom climate on student learning satisfaction has a positive and significant impact when classroom climate of each class is increased one unit, the class learning satisfaction can be also increased 0.47 units. $\gamma_{30} = 0.56$

($p < .001$), it represents classroom climate of students' perception to have a positive and significant impact on learning satisfaction when the value of classroom climate increases one unit, the value of students learning satisfaction will increase 0.56 units. If we separately consider the impact of students' individual levels and control classes overall satisfaction level of learning, the classroom climate of students' perception will roughly same affect the strength of learning satisfaction.

The random effects of level 2, $\tau_{00} = 25.01$ ($p < .001$), achieve significant level, it means that the Macro variable and Micro variable explain the influence of variables on learning satisfaction of Classes, there are still significant differences. In comparison with the null model, variance (τ_{00}) of error terms of Level 2 decreased from 31.02 to 25.01, it can be explained by the variance of learning satisfaction between classes percentage is 19.4%; the variance of an error term of class decreased from 87.74 to 52.58, it can explain the variance percentage of classroom learning satisfaction was 37.8%.

Cross-Level Interaction on Learning Satisfaction-Model E

Model of Level 1

Learning satisfaction $_{ij} = \beta_{0j} + \beta_{1j}$ (Student gender $_{ij}$) + β_{2j} (Student Classes $_{ij}$) + β_{3j} (Classroom climate $_{ij}$) + γ_{ij}

Model of Level 2

$$\beta_{1j} = \gamma_{10} + \gamma_{11} (\text{Teacher genders } _j) + \gamma_{12} (\text{Teachers with class time } _j) + \mu_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{3j} = \gamma_{30} + \gamma_{31} (\text{Teacher genders } _j) + \gamma_{32} (\text{Teachers with class time } _j) + \mu_{1j}$$

$\gamma_{11} = 10.54$ ($p > .05$), $\gamma_{12} = 10.95$ ($p > .05$), the items (γ_{11}) of cross-level interaction do not achieve significant level; it means that the learning satisfaction of student genders is not affected by the teacher genders and teachers with class time. $\gamma_{30} = 0.60$ ($p < .001$), the items (γ_{30}) achieve significant level, it means that classroom climate has positive impact on learning satisfaction, but the cross-level of interaction $\gamma_{32} = 10.01$ ($p > .05$), they do not achieve significant level, it means that classroom climate impacts on learning satisfaction but they are not affected by items of the teacher genders and class mentors with class time (Macro), the macro items of the teacher genders or class mentors with class time do not regulate the effect of classroom climate and learning satisfaction.

From the analysis of the multi-level model, we can find classroom climate (Micro) and context variable from class group aggregation (average classroom climate) impact on learning satisfaction, it represent significantly. The individual effect of student graders became insignificant from significance when the Macro impacts on learning satisfaction. The effect of class mentors with class time also became insignificant from significance when the Micro impacts on learning satisfaction. The individual variable of classroom climate impacts on learning satisfaction; it does not appear the effect of "big-fish-little-pond". Marsh, et al. (2008) investigated students' academic self-concept, they found academic achievement of individual student (Level 1) has positive effect on self-concept of academic achievement, otherwise the average academic achievement of classes (context variable) on the Micro variable of academic achievement, it has negative effect on the academic achievement, it can be proved that the classroom climate and learning experience or behavior has positive relationship (Chen & Chang, 2004; Sparks & Ganschow, 2007).

Table 2. Summary of multi-level model analysis result (5 models)

<i>Fixed Effect</i>	<i>Model A</i>	<i>Model B</i>	<i>Model C</i>	<i>Model D</i>	<i>Model E</i>
Intercept γ_{00}	58.89*** (1.27)	61.22*** (1.43)	62.14*** (1.30)	62.37*** (1.31)	61.99*** (1.61)
School scale γ_{01}			0.09ns (1.11)	-1.96ns (1.63)	-1.95ns (1.66)
Teacher genders γ_{02}			-4.63* (-2.02)	-4.07* (1.66)	-4.27* (1.89)
Teachers with class time γ_{03}			-3.91* (1.77)	-2.23ns (1.31)	-1.43ns (2.24)
Average classroom climate γ_{04}			0.53** (0.14)	0.47** (0.15)	0.47** (0.15)
Student Genders γ_{10}		0.13ns (0.73)		0.25ns (0.75)	0.87ns (0.99)
Teacher Genders γ_{11}					-0.54ns (1.11)
Teachers with class time γ_{12}					-0.95ns (1.50)
Student Grades γ_{20}		-4.89* (2.06)		-2.15ns (1.53)	-2.18ns (1.54)
Classroom Climate γ_{30}		0.56*** (0.08)		0.56*** (0.08)	0.60** (0.15)
Teacher Genders γ_{31}					-0.14ns (0.22)
Teachers with class time γ_{32}					-0.01ns (0.17)
Variance Estimates					
Residual of level 2 τ_{00}	31.02***	32.30***	16.32***	25.01***	26.99***
Effect of student genders τ_{11}		3.69*		3.72*	5.80*
Effect of classroom climate τ_{33}		0.12***		0.12***	0.14***
Residual of level 1 σ^2	87.74	52.60	87.76	52.58	52.41
Deviance	4767.97	4479.08	4744.09	4455.05	4451.18

ns $p > .05$ * $p < .05$ ** $p < .01$ *** $p < .001$

Urdu and Schoenfelder (2006) considered key to improving student motivation; teachers are able to trigger the attention of students in class activities, and positive emotions of classroom learning environment can attract students' attention, but also can improve their learning motivation. Schunk and Zimmerman (2007) also believes that class social environment will significantly affect students' emotions and behavior, thereby affecting learning outcomes, classroom teacher's job is to integrate the elements of class environment, the establishment of a student favorite, friendly classroom environment, stimulate students' creativity, let students like classes, willing to learn, there is a high degree of sense of commitment, they will try to participate in activities to obtain success. The results consistently show that over the past four decades: the quality of the school environment in the classroom is a decisive factor to determine student learning outcomes (Fraser, 2007). If the students' perception of the classroom environment more positive (better), students' performance will be better; class

learning-ring of students feeling is friendlier; the motivation of learning will be stronger. Students' self-assessment method is generally used to explore perception situations of classroom, the student perception of classroom life, that is, from students to explore consciousness, to get more realistic data. From a psychological point of view, the quality of classroom situations for students' self-belief and self-adjustment ability has a significant influence (Zimmerman, 2008). Create a quality learning environment, teachers must have effective classroom management strategies to accomplish the goals of teachers and proper classroom management investment, then the students will have high motivation to learn, have a better self-regulation strategies are more possibility to succeed.

CONCLUSION

On the basis of literature review and analysis it may be concluded as:

1. Between the two grades of each class in high school, students feel the learning satisfaction to have significant and obvious differences, the results of the ICC multilevel analysis achieve .261, which means that investigation of learning satisfaction, the variables of effect between classes group cannot be ignored.
2. Individual level variables of students' perception of classroom climate on student learning satisfaction has a significantly positive effect, the class average classroom climate context variables on student learning satisfaction also have a significant positive impact, when it controls individual level explanatory variables, the impact of context variables also become significant.
3. On the results, teacher genders on student learning overall satisfaction levels have a significant impact, students in the female class mentors; its learning experience satisfaction was significantly higher than male class mentors.
4. If we do not consider the individual-level variables (Micro) to explain the impact of teachers with class, variables for each class time learning satisfaction significantly affect the results, but the impact of control variables to explain the individual level, the impact is not significant.
5. If we do not consider the overall impact of variable levels (Marco), interpretation variables of graders learning satisfaction have a significant effect, high school sophomore (second year student) learning satisfaction was significantly higher than first-year students, but control the variables of the overall level interpretation, it cannot achieve significant.
6. Two variables of teacher genders and teachers with class time, they do not have significant cross-level interaction (cross level interaction) with variables of classroom climate on students' perception of student learning satisfaction, students' perception of classroom climate impact on students' learning satisfaction, did not effect from variable of teacher genders/teacher with class time.
7. Pearson correlation and multi-level classroom climate models show that the better classroom climate will have better learning satisfaction, its Critical ratio (CR) is .334, which means that classroom climate of students' perception can explain 33.4% of the learning satisfaction variance.
8. When the model is incorporating the individual level and the overall level of explanation variables, learning satisfaction between classes will still exist significant differences, shows that there is variable of satisfaction in the outcome has not been discussed in the model, it can be a further study.

FURTHER RESEARCH SUGGESTION

1. Increase the number of classes: The study extracted only 20 the number of classes, future research may consider taking further the number of group classes, so that the group can meet the criteria for the number of samples analyzed multilevel mode scholars advocate than 30/30 (Kreft, 1996).
2. Individual student-level demographic variables can explore students' academic achievement, socioeconomic status; overall level may consider the inclusion of students attending area schools (city or non-city), because the practice in classroom management, student academic achievement, family socioeconomic status, students attending area schools and other variables, are likely to have a significant impact on learning satisfaction.

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