THE INFLUENCE OF PERCEIVED CLASSROOM ENVIRONMENT ON STUDENTS' LISTENING SKILLS AND ACADEMIC ACHIEVEMENT

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Abstract

Classroom environment plays an integral part in the learning process. This study examined the perceptions of psycho-social aspects of classroom environment with listening skills and academic achievement of Thai and Foreign students at an international university in Bangkok, Thailand.

Using the simple random sampling technique, a sample of 400 Thais and Foreign students, both male and females students were selected and administered the "What is Happening in This Class?" Scale consisting of 7 sub-scales (Fraser, Fisher, & Mc Robbie, 1996). For listening skills the Listening-self Inventory which is the edited version developed by Steven Robbins (1999) was used.

Pearson's Correlation of Coefficient (r) of analysis was used to test all four hypotheses. Hypothesis one findings indicated an insignificant and negative significant relationship of perceived classroom environment and listening skills for Thai and male students. For females and foreign students a low and negative relationship existed indicating that when classroom environment was good listening declined. Hypothesis two findings indicated that perceived classroom environment was poorly and positively significant with students' academic achievement for Thai and male students. For females and foreign students a low and positive significance existed indicating that when classroom environment was good GPA's were better.

Hypothesis three indicated that when dimensions of classroom environment were examined it was found that, out of seven dimensions of perceived classroom environment only two had low and negative significance with listening skills. Involvement and investigation dimensions had an inverse relationship with listening which shows that when the classroom involvement and investigation were higher their listening skill was lower. Hypothesis four indicated that when student cohesiveness, cooperation, equity and task orientation dimensions of classroom environment were better their academic achievement was slightly better. Hence, all hypotheses were very marginally accepted because of the low level of significance between perceived classroom environment, listening skills and academic achievement.

The above findings can be attributed to classroom environment in Thai culture and succinctly described in the conclusions of the study.

Keywords: Academic Achievement, Classroom Environment, Listening Skills.

Introduction

"I realized if you can change a classroom, you can change a community, and if you change enough communities you can change the world" (ErinGruwe) Classroom environment, classroom climate or the learning environment can be defined as the social, emotional and physical factors that exist in the classroom. It was Kurt Lewin (1936) who first proposed that both personality and environment were powerful determinants of behavior and developed the formula B=f (P, E). Most research findings have thrived in western cultures (Fraser, 1994, 1998; Fraser & Walberg, 1991; Newby & Fisher, 1997; Stolarchuk & Fisher, 1999; Teh & Fraser, 1995; Khine & Fisher, 2001) In Asian cultures classroom environment research has recently gathered momentum and it is evident that classroom environment can influence the teaching and learning process and finally students' outcomes (Aldridge & Fraser 1999, Khine & Fisher, 2001, Riah & Fraser, 1998; Wong & Fraser, 1994) The purpose of education is to produce all rounded students who need to develop intellectually, physically, spiritually and emotionally. The learning environment can include the learner, other students, and teachers as well as the physical environment. A sustainable and innovative environment can shape the learner and the learner can influence the environment in return. Vygosky's (1978) Social Cognitive Development Theory is reflected in a classroom environment in that, interaction and affiliations between students and teachers and between students and other students can impact learning development. Research evidence indicates that academic engagement has a linkage with success in school (Fredricks et al., 2004; National Research Council and the Institute of Medicine, 2004; Reschly & Christenson, 2006). If this is so, students who are behaviorally and cognitively engaged may manifest higher grades compared to students who are chronologically disengaged and manifest long–term detrimental effects on school performance and drop-out rates (Reschly & Christenson, 2006). Students' further need to listen to teachers' instructions to learn and this is often not taught which can result in poor listening. (Swain, Friehe, & Harrington, 2004). "Listening involves hearing and

cognition and assumes the ability to selectively perceive, interpret, understand, assign meaning, react, remember, and analyze what is heard" (Flynn, Valikoski and Grau (2008, p 143). Research on school climate and achievement indicates that building classroom connections can lead to increased achievement gains (Church, 2006; Uline, & Tschannen-Moran, 2008). The question arises as to whether "the classroom environment influences students listening styles and academic performance"?

Purpose

The main objective of this study is to discover if classroom environment or any particular dimension of classroom environment actually influences listening skill of students in the Thai context, so educators could take some actions to facilitate those dimensions of classroom environment.

Hypotheses

1. Perceived classroom environment is related to listening skills.

1.1 Male students' perceived classroom environment is associated with listening skills.

1.2 Female students' perceived classroom environment is associated with listening skills.

1.3 Thai students' perceived classroom environment is associated with listening skills.

1.4 Foreign students' perceived classroom environment is associated with listening skills.

2. Perceived classroom environment is related to academic achievement.

2.1 Male students' perceived classroom environment is associated with academic achievement.

2.2 Female students' perceived classroom environment is associated with academic achievement.

2.3 Thai students' perceived classroom environment is associated with academic achievement.

2.4 Foreign students' perceived classroom environment is associated with academic achievement.

3. Perceived classroom environment dimensions are related to listening skills

3.1 Student cohesiveness is related to listening skills.

3.2 Teacher support is related to listening skills.

3.3 Involvement is related to listening skills.

3.4 Investigation is related to listening skills.

3.5 Tasks orientation is related to listening skills.

3.6 Cooperation is related to listening skills.

3.7 Equity is related to listening skills

4. Perceived classroom environment dimensions are related to academic achievement.

4.1 Student cohesiveness is related to academic achievement. .

4.2 Teacher support is related to listening academic achievement.

4.3 Involvement is related to listening academic achievement.

4.4 Investigation is related to academic achievement.

4.5 Tasks orientation is related to academic achievement.

4.6 Cooperation is related to academic achievement.

4.7 Equity is related to academic achievement.

Benefits of Research

Teachers prefer to teach in ways that they would like to learn but this may not be aligned with students learning or listening styles. Assessment of the classroom environment can sensitize educators to create a positive environment by adapting to students needs so as to increase students' attention and eventually academic performance by provision of the right reinforcements. A good relationship between teachers and students could increase motivation, decrease drop-out/ retirement rates, decrease disruptive behaviors, decrease tardiness and absenteeism. Besides some dimensions of classroom environment that are not feasible may be altered to increase student-environment fit and promote a caring and healthy atmosphere.

The review of related literature indicates that cross-cultural research has been conducted but is still insufficient to make generalizations. Future studies could be conducted on larger population and comparison which is inclusive of more cultures so as to get an idea of the verbal and non-verbal restraints that are acceptable in particular cultures and which cultures focus on academic performance rather than on social and emotional/social development.

Also other variables like motivation, cooperative/ project-based learning, learning styles, the teaching styles, personality, self-efficacy etc could be antecedents, moderators or consequences of academic performance. In the present research, listening styles could also act as a moderator or mediator variable between classroom environment and academic performance.

Research Process

For the Descriptive analyses measures of central tendency such as the mean, median and mode and measures of variability such as standard deviation, skewness and kurtosis and fiduciary limits were utilized to find out if there are differences in the perceptions of classroom environment between males and females and between Thai and Foreign students.

For the inferential analysis, Pearson's Correlation of Coefficient (r) of analysis was used to find out the relationship between perceptions of classroom environment and perceived listening skills of males and females and Thai and Foreign students. The relationship between perceptions of classroom environment and academic performance of males and females and Thai and Foreign students was also analyzed. Finally the dimensions of classroom environment that have a relationship with listening skills and academic performance were analyzed.

Population and Sample

The simple random sampling technique was utilized. The sample size consists of a total of 399 students, 199 who are Thai and 200 who are Foreign with 200 males and 199 females in each category. First year students were excluded from the analysis due to their inability to report a GPA at the time of data collection. Perceived classroom environment is regarded as the independent variable where as listening skills and academic performances are the dependent variables.

Instruments

The "What is Happening In This Class"? (WIHIC) scale consists of 7 sub-scales and 56

positively written statements (Fraser, Fisher, & Mc Robbie, 1996) which are (1) Student Cohesiveness, means the extent to which students are altruistic and support each other. (2) Teacher Support, means the extent to which the teacher helps with achievement of goals, is friendly, shows interest and trust students. (3) Involvement means the extent to which students pay attention, participate in classroom discussions and perform the allocated work. (4) Investigation means the extent to which skills are applied and used for problem solving. (5) Task Orientation, means the extent to which the activities that are planned are completed. (6) Cooperation means the extent to which students cooperate rather than compete for task learnt in the classroom and (7) Equity, means the extent to which the teacher treats students with fairness and equality. These items are measured using a five point Likert scale from almost never=1 to almost always=5. The Cronbach Alpha for this scale was .862.

The Listening-self Inventory is the edited version of E.C. Glenn and E.A. Pood, "Listening Self-Inventory," Supervisory Management (January 1989) by Steven Robbins (1999).which uses a five point Likert scale from strongly agree=5 to strongly Disagree=1. Only four statements, 4, 12, 13 and 15 are positively worded but all other statements are negatively worded, indicating that a high mean score for the negative items displays a lower self-perceived listening skill. The Cronbach Alpha for this scale was .828.

Conclusions

Overall, the findings indicated that perceived classroom environment was poorly and negatively significant with students' listening skills ($r = -.045$, $-.207$, $-.016$, $-.197$, $p < .05$) for all groups of students as shown in Table 1.The respondents reported an inverse relationship that although the classroom environment was perceived as good, the listening skills declined.

For male students, the association was insignificant and negative between perceived classroom environment and listening skills. Female students reported a low and negative significance between classroom environment and listening skills ($r = -.207$, $p < .05$). Foreign students also reported a low and negative significance between classroom environment and listening skills ($r = -.197$, $p < .05$). However, the relationship between perceived classroom environment and listening skill was insignificant and negative for Thai students.

Listening skills depend on several external factors and irrespective of the classroom environment, students may not necessarily pay attention. Firstly, English is used as a medium of instruction and students may be less engaged since English is a foreign language for Thai students rather than a second language (Penporn and Pagram, 2006). Students considered Foreign were primarily from other East-Asian countries like China, Burma, Vietnam, India, Bhutan, and were therefore considered non-native speakers. Secondly, Asian students are inclined to learn by recital/ rote methods and learning is more teacher-oriented (Penporn and Pagram, 2006). Kullberg (2010) noticed that Thai students were distracted with other activities during lecturers which involved rote and recital methods. Thirdly, usage of technology and social media in classrooms is a norm these days in classrooms. Sukhapabsuk (2013), found that the most disrupting factors for lack of attention in order of priority were use of technology, interaction

with other students while the teacher as lecturing, emitting noises, sleeping and tardiness. Braden and Smith (2006) study is also convergent with this finding that technology although inevitable these days had the most undesirable impact on classroom behaviors. Just like Chinese students (Bhagat, 2002), Thai students prefer communication with high media richness like face-to-face or phone calls instead of online discussions and e–mails (Thongprasert, 2009). Finally, the emphasis in Asian cultures is on performance and examinations which are concerned with the curriculum unlike western cultures that stress on social, emotional academic aspects according Aldridge, Fraser and Huang (1999) which make tutorials a thriving business in Thailand (Bangkok Post, 2011).

Overall the findings indicated that perceived classroom environment was poorly significant and positively correlated with students' academic achievement ($r = .026, .226, .111. .143, p < .05$) as shown in Table 2. The respondents whose GPA's were high reported better degree of perceived classroom environment. For male students, the association was insignificant and positive. Female students reported a low and positive significance between classroom environment and GPA ($r = .226, p < .05$). GPA's of foreign students was low and positively significant to perceived classroom environment ($r = .143, p < .05$). However, the relationship between perceived classroom environment and GPA was insignificant and positive for Thai students.

Studies conducted in western cultures indicate that classroom environment does have an impact cognitive engagement, with evidence of better grades (Rimm-Kaufman & Chiu, 2007; Wentzel, 1998) and increased performance on tests that are standardized (LaRocque & Mvududu, 2008) although, some studies are contradictory (Reyes, M.R; Brackett, M.A ; Rivers, S. E. White,M. & Salovey. P, 2012) and coincides with the findings in this study.

Culture determines actions, behaviors and decisions (Hofstede & Hofstede, 2005:Muler. 2005). In Thai culture, rote learning, an authoritarian culture and an education system that is centralized is pervasive which inevitably leads to extremely poor outcomes of students (Bangkok Post, September, 2015). Being passive is considered normal for Thai students (Narjaikaew, Emarat, & Cowie, 2009; Soankwan, Emarat, Arayathanikul, & Chitaree, 2007) as it is generally the norm in Asian cultures where presentation of ideas are rarely expressed in front of others, since students are embarrassed to present incorrect ideas in front of their peers (Choi, Nam, & Seung, 2011). The 17th education minister of Thailand, General Duangporn agreed that the "teach less and learn more" strategy will ultimately work since students will participate in more extracurricular activities and sit less at the desk (Bangkok Post, October, 2015).

Irrespective of the classroom environment, it could be that variables like intrinsic factors, goal orientations and self-efficacy beliefs may be contributors of academic achievement. (Ames, 1990; Ames, 1992; Greene, Miller, Crowson, Duke & Akey 2004; Müller & Louw, 2004; Stefanou, Perencevich, DiCintio, Turner, 2004). Students who are self-efficacious have better judgments of their ability to succeed on a task and hence have higher intrinsic enjoyment with the task which leads to persistence with goals. Pajares and Urdan (2006) strongly contend that examining factors like motivation, learning, classroom performance are

futile if self-efficacy beliefs are not given preference.

Huang's (2003) research investigating 13,000 students in high schools revealed that females' students possess higher scores for perception of the learning environment compared to males.

Overall all dimensions of perceived classroom environment pointed out a poor and negative significance with listening skills of students ($r = -.049, -.066, -.126, -.179, -.024, -.066, -.045$, $p < .05$) as shown in Table 3. A further investigation into the dimensions of classroom environment and listening skills indicated that Involvement ($r= -.126$, $p < .05$) and Investigation ($r= -.179$, $p < 0.01$) were only two out of seven dimensions that had low and negative significance with listening skills. The other five dimensions had an insignificant and negative relationship with listening skills. The respondents reported an inverse relationship, that when the classroom Involvement and Investigation were higher their listening skill was lower.

Involvement means the extent to which students pay attention, participate in classroom discussions and perform the allocated work and Investigation, means the extent to which skills are applied and used for problem solving. Although both dimensions like involvement and investigation of classroom environment existed, it does not mean that students actually listened to what the teacher lectured. The instructional methods in the university use English and Thai students' English listening and speaking skills are inadequate (,Jaiyai, Torwong, Usaha, Danvirattana, Luangthongkam & Piyadamrongchai (2005). Punthumasen (2007) claimed that students may get bored with the subject matter and the methodology used for teaching. Although, students try to pay attention they may not possess the ability to listen to the content or use English daily (Pawapatcharaudom, 2007). Most East-Asian students faced problems with learning styles that are different from their own (Brown, 1994) which could affect their motivation, performance and eventually their achievement.

Passing national/ entrance examination was a top priority for Thais and these examinations exclude speaking and listening (Karnnawakul, 2004, p. 81; Kimsuvan, 2004: 79). Hence, the purpose of listening is defeated since there is no alignment between policies and the real world communication and students' readiness is not inclined towards listening rather than on achieving the grade which is a short-tem solution. Therefore, students could be involved and transfer skills to problem solving and although their intrinsic/integrative motivation to listen may be low, their extrinsic/instrumental motivation to achieve grades may be higher.

Overall four dimensions namely, 1, 3, 5, 6 and 7 of classroom environment were poorly and positively significant with academic achievement ($r =.102, .076, .208, .120, .130$, $p < .05$) as shown in Table 4. The other two dimensions namely, 2and 4 were poorly and negatively significant with academic achievement as shown in Table 4. A further investigation into the dimension of classroom environment and academic achievement indicated that three out of the seven dimensions that were significant and positively associated with academic achievement at the 0.05 level of significance, namely student cohesiveness ($r=.102$, $p < .05$), cooperation ($r=.120$, $p < .05$) and equity ($r=.130$, $p < .05$). Task orientation was the only dimension that had positive relationship with academic achievement at the 0.01 level of significance ($r=208$, $p < 0.01$). The respondents reported that when the student cohesiveness,

cooperation, equity and task orientation dimensions were better their academic achievement was better.

Student Cohesiveness means the extent to which students are altruistic and support each other. Task Orientation means the extent to which the activities that are planned are completed. Cooperation means the extent to which students cooperate rather than compete for task learnt in the classroom and Equity means the extent to which the teacher treats students with fairness and equality.

Studies conducted in western cultures (McMahon and Wernsman, 2009) indicated that aspects like cohesiveness, higher cooperation, lower levels of conflict and better relations with their friends could increase grades. The psycho-social aspects of classroom environment can be related to academic engagement and achievement (Mohsenpour, 2004; Keramati, 2006; Bazargan, 2007; Keramati & Hosseini, 2007). Recent studies by Abolmaali, Hashemian and Anari (2011) recognized that aspects like challenge, interest and choice can influence academic performance.

Thai culture can influence how students learn and relationships with their teachers have an impact on satisfaction (Adams &Vernon, 2004). It can be noticed that all the aspects that have an impact on academic achievement are related to collectivism and cooperation. Thai students are not independent learners and feel comfortable to get into social groups to discuss unclear topics with their friends (Penporn and Pagram, 2006). Thai students do not "dare to think" differently (Bangkok Post, 2007) and share their knowledge with others (Thongprasert, 2009). A study conducted in Australia discovered that Thai students preferred to work as a group than alone (Traindis, 1995; Burn and Thongprasert, 2005) and avoiding disagreements in order to maintain the relationship with friends is a priority. Chow (2000) pointed out that this in-group and out-group nature of collective cultures can act as a neutralizer for sharing knowledge. Students will be reluctant to oppose the collective values of the group and do not value individual interest which could oppose the in-group (Littlewood, 2001). Although students often disagree with the teacher they prefer harmony (Laopongharn and Sercombe, 2009). For Thai persons, achievement has high social emphasis which inhibits a person from achieving. Being submissive to superiors and working in harmony while working or not working helps with success in life (Komin, 1991).

Recommendations

The scale used in the present study is not comprehensive since it focuses on psycho-social issues but ignores the physical aspects of the environment. Secondly, most often questionnaires are used to measure classroom environments are structured and distributed in one common language like English which the researchers presumed could be comprehended by most students. Furthermore, more objective, qualitative, experimental methods, interviews or observations which are more appealing but time consuming could be utilized. Thirdly, this descriptive study assumes that students listening and academic performance can be attributed to the classroom environments and pays lesser attention the context of home, family, peers, socio-economic status and personality traits like self-efficacy, intrinsic motivation etc. Fourthly, although classroom environments can be good predictors of students'

performance the content of different subjects and pedagogies by which students learn can be investigated. Students could have better academic performance in some subjects in accordance with their preference. Finally, although the sample size of around 400 was sufficient and represented the population, the sample was elevated form one international university and not expanded to other public institutions. The statistical techniques used were rather simple but more techniques like multiple regression and structural equation modeling could be used to obtain more precise results rather than just relationships. Listening skills could also be a moderator variable since it can affect academic performance.

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