Testing School Climate as Predictors of High School Students' Academic Self-Regulation and Achievement Motivation between Public and Selective Schools in Urmia City- Iran

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Abstract

This study examined to assess whether school climate variables predicted students' academic self-regulation and achievement motivation and compared how these variables acts in two types of high school (public and selective) in Urmia City. Using multi-measure research design involving 197 high school students and we compared prediction of these students' academic achievement (The Academic Motivation Scale) and Academic Self-Regulation Questionnaire (SRQ-A) by the classroom and School Community Inventory. Hierarchical regression analyses revealed that the school climate predicted the students' academic self-regulation significantly, but the school climate did not predict either achievement motivation significantly. In addition, no significant differences were found between public and selective high schools. Our results suggest that academic self-regulation could be encouraged through the main factor as school climate.

Keywords: school climate. Academic self-regulation- achievement motivation. High school students

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Introduction

School climate has been associated with important school outcomes. School climate is a broad term used to describe the school environment, and while it has no consensus definition, reviews of the topic have identified several recurring themes: order, safety, and discipline, academic supports, personal and social relationships, school facilities; and school connectedness (Austin, O'Malley, & Izu, 2011).

Growing evidence suggests that school climate can affect student social environment, behavior, and learning and that when organizational processes and social relationships are addressed, positive behavioral change can occur (Flay, 2000; Patton et al., 2006).

Motivation is an innate phenomenon that is affected by four factors including: 1-Situation (environmental and outer stimulants), 2- Temper (inner state of organism), 3- Aim (aim of behavior, purpose and tendency), and 4- Tool (tools applied to achieve goals). (Firouznia, Yousefi, & Ghassemi, 2009).

Dörnyei (2001) described motivation as "the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalised and carried out" (p. 9).

Research clearly shows that students with higher motivation have higher academic achievement (Aronson, 2002), and this is particularly true for students with high intrinsic motivation to learn. Research has also demonstrated that intrinsic motivation promotes engagement in school, which then promotes achievement (Fredricks, Blumenfeld, & Paris, 2004).

Zimmerman & Schunk (2008) have reported that motivation indeed determines the degree to which students invest in academic self-regulation, which in turn predicts their subsequent academic achievement (Woogul, et al. (2014). When students are motivated to learn, they are more likely to invest the necessary time and energy needed to learn and apply appropriate SRL skills, and when students are able to successfully employ self-regulation strategies, they are often more motivated to complete learning tasks (Zimmerman, 2000).

Self-regulated learning is a process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences. This process occurs when a student's purposeful actions and processes are directed towards the acquisition of information or skills (Zumbrunn, et al. 2011).

From a theoretical perspective, *self-regulation* is a proactive process whereby individuals consistently organize and manage their thoughts, emotions, behaviors, and environment in order to attain academic goals. Students become self-regulated by setting goals, selecting and using strategies, monitoring performance, and repeatedly reflecting on learning outcomes over a lengthy period of time (Zimmerman, 2008).

Students who are self-regulated   have certain features distinguishing them from students who are not. These features include 1) using cognitive strategies, 2) controlling and trying to arrange time, 3) programming and controlling mind processes to reach personal goals, 4) creating appropriate learning environments, 5) putting in adequate effort to control and regulate academic assignments and the class environment (Montalvo & Torres, 2004).

Self-regulation of learning involves learners setting goals, selecting appropriate learning strategies, maintaining motivation, and monitoring and evaluating academic progress (Zimmerman, 2000).

The *purpose* of current study was to determine the relation between self-regulation and achievement motivation based on school climate among students to achieve the main goal of predicting self-regulation and achiement motivation based on school climate and compare it among students of public and selective high schools of Urmia City.

Method

Participates:
All female students of of public and selective high schools of Urmia City who were studying in their second semester of 2014-2015, participated in this study. Random sampling method was applied to get a sample from public schools in which two schools from two areas of Urmia were selected. Two first-grade classes of high school selected in which the number of students were 90. All first-grade classes of selective high school selected in which there were 107 students. Total sum of samples were 197 students.

Measurements:
1-   Academic Self-Regulation Questionnaire (SRQ-A), (Connelly & Ryne (1987).
2-   The Achievement Motivation Scales (Denver Youth Survey (Institute of behavioral Science, 1990).
3-   The Classroom and School Community Inventory,

.

Reliability of measurements study

Scale	Cronbach's alpha
Achievemnt Motivation	0.77
School Climate	0.70
Educational self-regulation	0.76

Results

According to the results of the samples, 107 samples were from selective school students (55%), and 90 students from public schools (45%).

Table 1: Difference of average of variables in public and selective school

Statistical test Component	For two independent groups of t for comparing the averages			
	School type		T-Value	Mean difference
	Public	selective		
Achievement Motivation	4.43	4.49	1.03	0.06
School Climate	1.78	1.75	-0.34	-0.02
Academic Self-Regulation	3.05	3.10	0.81	0.04

T- test was used for two independent samples to demonstrate whether there are difference between achievement motivation, school climate and self-regulation between two groups of schools.   The results of Table (1) indicate that there is no significant difference between the factors of achievement motivation, school climate, self-regulation based on to the type of their schools.

Table (2): Correlation matrix of variables

	Variable	1	2	3
1	Achievement Motivation	1		
2	School Climate	0.125	1	
3	Self-regulation	0.40**	0.42**	1

According to Table (2), there is meaningful relation between students' achievement motivation and self-regulated learning (0.40) which generates redoubled force for achieving the goal.   Also, there is relation between the students' self-regulation and school climate (public and selective schools)

Table (3): Standardized rand unstandardized regression coefficients of predictive model of self-regulation

Model	standardized parameter estimates		Standardized coefficients	T	The significance level
	B	Estimation standard error	Beta		
Constanent	2.421	0.104		23.223	0.000
School climate	0.372	0.057	0.42	6.541	0.000

In response to the question of how school climate can predict academic self-regulation, we used multiple regression coefficients whose results presented in the Table (3). According to Table (3), the effect of school climate on self-regulatory (0.42), in 0/001 level that indicated a significantly positive. Thus, according to above results, school climate positively and significantly predictd the self-regulation of the students, this means the more favorable the school climate was, the more self-regulation the students had.

Table (4): Standardized and unstandardized regression coefficients of predictive model of achievement motivation

Model	unstandardized parameter estimates		standardized parameter estimates	T	Significance Level
	B	Estimation standard error	Beta		
Constonant	4.28	0.11		38.54	0.001
School climate	0.10	0.06	0.12	1.76	0.08

In response to the question of whether school climate can predict student achievement motivation, the findings indicate that the effects of school climate on achievement motivation (0.12) at the level of 0/08 is not significant. So according to the results in Table (4), the variable of school climate is not capable of predicting the motivation of the students' achievement.

Discussion

The purpose of this study has been to find a relation between self-regulation of students and school climate and achiement motivation. Moreover, the difference of these variables was studied in both public and selective schools. The findings of this study demonstrated that school climate can predict the self-regulation of students but it can't influence the students' achievement motivation.

Our findings showed that the influence of self-regulation over achievement motivation is positive. This means the more self-regulation is, the more achievement motivation will be. Interestingly, there is no significant difference between the factors of achievement motivation, school climate, and academic self-regulation among students according to the type of their schools. And this indicated that public schools have good content.

Pintrich and De Groot (1990) and Lee Ki (2008) reported that as students' self-regulated learning increases, achievement motivation increases respectively and in this analysis, their achievement motivation is the factor that corresponds with students' self-regulated learning. Students who have high achievement motivation, are successful in school assignments. Even after they failed in doing something, they won't give up and they do their best to succeed.

It can be said that if the school climate is not favorable for the student, the student will be discouraged. The effect of school climate over self-regulation is positive. That means, the better the school climate is, the better self-regulation the individual will have.

As Zimmerman (1989, 2001) noted effective self-regulated learners actively set goals, decide on appropriate strategies, plan their time, organize and prioritize materials and information, shift approaches flexibly, monitor their learning by seeking feedback on their performance and make appropriate adjustments for future learning activities (Effeney, et al., 2013).

A positive clamate and stable school, breeder and is indispensable for achievement and learning for learners. A safe atmosphere can create the feeling safety and respect students and encourage them to be active and make progress and contribute to the effectiveness of the school.

These findings suggest that how a school atmosphere can have great impact on students' academic self-motivation, but it appears to be affected by factors other than school clamate.   Future researches should study other factors to determine what variables can affect students' achievement motivation.

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