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# Relations among Perceptions of Classroom Activities and Self-Regulating Learning

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## Abstract

**Problem Statement:** self-regulating learning is important in education, work and life situations. So it necessary that researches investigate origins of self-regulating and factors that related to it. One factors that effect on self-regulating is perceptions of class and university activities.

**Purpose of Study:** The aim of this research is studying the relations among classroom perceptions, and self-regulating and predicting self-regulating by perceptions of class activities components.

**Research Methods:** To do the study, a multi-stage cluster sampling method was used and a sample of 600 students from Iranian students, were selected, Students' The motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990), and Students' Perceptions of Classroom Activities (Gentry, Gable, & Rizza, 2002), were administrated to students as a group. Questionnaires validity and reliability were verified.

**Findings:** The results of Pearson correlation showed that the mutual correlations between all components of classroom perceptions, (interest, joint, challenge and choice), with self-regulating were positive and significant statistically ( $p < 0.01$ ). Results of regression analysis show that self-regulating learning was predicted by perceptions of class activities ( $F_{(4,487)} = 13/23$ ,  $p < 0/001$ ).

**Conclusions:** For increasing self-regulating learning is essential to considering perceptions of class and university activities.

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**Keywords:** self-regulating learning, perception of classroom

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## 1. Introduction

The purpose of this study was to assess Relations among perceptions of classroom activities and self-regulating learning. Self-regulation of learning has been studied using the definition of strategies for regulating cognitive

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processes with which students may control and monitor their learning, including goal-setting, planning, executing, managing, monitoring, self-evaluating, and modifying incorrect information (Pintrich, 1999). The components of self-regulated learning according to this definition would be cognitive, metacognitive, and resource-management strategies.

Environments and social situations have important effects in reinforcing and shaping self-determination and self-regulation (Reeve, 1998). In this respect, researchers have tried to study factors relating to or affecting self-regulation, including autonomy, support involvement, and warmth (Grolnick, *et al.*, 1997) which are critical variables affecting perceptions and motivational beliefs of students, and thus, their self-regulated learning. For example, teachers and parents who decide to control their students or classes will force their students to perceive control in the environment, which can lead to external and performance motivations, and in turn, avoidance of self-regulation.

The theoretical foundations of the present study are social-cognitive theory (Bandura, 1986, 1997; Schunk & Zimmerman, 1997), and self-determination theory (Grolnick, *et al.*, 1997). Based on social-cognitive theories too, the above processes are observed. Pintrich (2004) emphasized the integrated cognitive, motivational, affective, behavioral, and contextual dimensions of self-regulated learning in his contextual model of self-regulated learning. In his model, the dimensions of self-regulation are closely related.

The class or school, teaching methods, and aspects of the school system have important effects on academic performance and cognitive processes, especially self-regulating learning, goal orientations, and self-efficacy (Anderman & Midgley, 1997). Students' perceptions of classroom activities are critical variables and include interest, choice, challenge, and joy (Anderman & Midgley, 1997). According to other researchers, these include perceptions of the tasks and authorities, how performance is evaluated (Ames, 1992), the difficulty of the tasks, and the type of evaluation system used (Church, Elliot & Gable, 2001). In particular, studies show that there are positive correlations between students' perceptions of class constructs and their chosen goal orientations (Anderman & Midgley, 1997). Research indicates some potential causal relationships: students' perceptions of environmental constructs affect their goal orientations, and in turn, their self-regulated learning and other related cognitive and motivational components. Ames (1992), in reviewing studies about goal orientations, points to class constructs (perceptions of class activities) and their effects on goal orientations, and mastery goals which may lead to self-regulating learning and other academic performances. Class constructs include designing tasks and evaluations, experiential opportunity, and teachers' use of authority.

So, we are going to examine Relations among perceptions of classroom activities and self-regulating learning in students of Heigh School and University.

## 2. Method

*Participants:* Participants were 639 subjects (172 boys and 475 girls), from Ferdowsi University of Mashhad, using a multistage cluster-sampling method. The school of students was Education (59), ministerial sciences (119), Technical –Engineering (108), literature (125), Farmer (65) and Basically sciences (73).

*Measurement:* 2 paper-and-pencil inventories were administered to the participants in groups of 20 to 25: Motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990), Students Perceptions of Classroom Activities (Gentry, *et al.*, 2002). The Motivated Strategies for Learning Questionnaire was translated and used by other Iranian researchers and its validity confirmed (Hosayni Nasab & Ramshe, 2000; Khademi & Nowshadi, 2006; Sobhani Nejad & Abedi, 2006). Students' Perceptions of Classroom Activities scale (Gentry, *et al.*, 2002) scale ( $\alpha = .93$ ) is rated on a 5-point Likert-type scale (anchored by 1: and 4: ), and has four subscales of Interest ( $\alpha = .82$ ; 8 items), Choice ( $\alpha = .66$ ; 9 items), Challenge ( $\alpha = .76$ ; 7 items), and Joy ( $\alpha = .87$ ; 7 items). The total scale has 31 items. Confirmatory analysis yielded fit indices RMSEA = .048, GFI = .98,  $\chi^2 = 85.93$ ,  $df = 33$   $p = 0.051$ .

### 3. Results

Research findings are presented here in two sections: descriptive and correlation analysis. Table 1 represents the means, standard deviations and Pearson correlations for students' perceptions of classroom activities (Interest, Choice, Challenge, and Joy), and self-regulated learning (Cognitive, Metacognitive, and Resource Management strategies) separately for students of height school and university.

Table1. Statistics of perceptions of classroom activities and self-regulated learning components in university

| Variable              | n          | Statistics   |               |               |              |
|-----------------------|------------|--------------|---------------|---------------|--------------|
|                       |            | Min          | Max           | M             | SD           |
| Interest              | 625        | 8.00         | 81.00         | 23.63         | 6.29         |
| Choice                | 619        | 13.00        | 73.00         | 29.68         | 4.01         |
| Challenge             | 584        | 15.00        | 58.00         | 25.86         | 3.62         |
| Joy                   | 628        | 7.00         | 54.00         | 21.34         | 6.26         |
| <b>perceptions</b>    | <b>538</b> | <b>64.00</b> | <b>168.00</b> | <b>100.66</b> | <b>13.45</b> |
| Cognitive             | 609        | 14.00        | 131.00        | 64.11         | 13.87        |
| Meta- Res             | 602        | 16.00        | 125.00        | 39.40         | 10.23        |
| <b>self-regulated</b> | <b>572</b> | <b>33.00</b> | <b>208.00</b> | <b>103.59</b> | <b>20.37</b> |

In order to studying relations among components of perceptions of classroom activities and self-regulated learning we compute Pearson correlation coefficients (table2). Any perceptions of classroom activities (Interest, Choice, and Challenge) have related to self-regulated learning except Joy, statistically (table2). Also perceptions (generally) related to components of self-regulated learning, statistically. Some perceptions related to some components of self-regulated learning but some not (table2).

Table2. Correlation coefficients between perceptions of classroom activities and self-regulated learning

| components           | self-regulated learning |               |               |
|----------------------|-------------------------|---------------|---------------|
|                      | self-regulated          | Meta-reso     | cognition     |
| perceptions Interest | <b>0.26**</b>           | 0.13**        | 0.30**        |
| Joy                  | <b>0.07</b>             | 0.08          | 0.06          |
| Challenge            | <b>0.19**</b>           | 0.01          | 0.20**        |
| Choice               | <b>0.23**</b>           | 0.11**        | 0.26**        |
| <b>perceptions</b>   | <b>0.31**</b>           | <b>0.16**</b> | <b>0.33**</b> |

\*\*=*sig*<0.05

In addition to examining the simple correlation coefficients, the multiple regressions were also examined. Results show that self-regulated learning is predicted by perceptions of classroom activities (Interest, Choice, Joy and Challenge) ( $F_{(4,487)} = 13.23$ ,  $p < 0.001$ ,  $R^2 = 0.09$ ). Regression Coefficients for truth, pure nature and distrust (predictors) were significance statistically ( $p < 0.001$ ) and for dominance was not significance.

Results of studying regression coefficients and (t) tests related show those regression coefficients from interest to self-regulated learning is significance statistically ( $b = 0/58$ ,  $t = 3/21$ ,  $p = 0/001$ ), also for challenge to self-regulated learning ( $b = 0/63$ ,  $t = 2/50$ ,  $p = 0/012$ ). But regression coefficients from choice and joy to self-regulated learning are significance statistically.

#### 4. DISCUSSION

Our findings are consistent with social-cognitive theory (Bandura, 1986, 1997; Schunk & Zimmerman, 1997), social-cultural theory (Vygotsky, 1978) and especially self-determination theory (Grolnick, *et al.*, 1997). Self-determination theoreticians believe that environments, relationships, and social situations have important effects in reinforcing and shaping of self-determination and self-regulated learning (Reeve, 1998). In developing self-regulated learning, self-efficacy has a critical role (Schunk & Zimmerman, 1997). Perceptions are affected by the environment, which in its turn, affects self-efficacy (Bandura, 1986, 1997) and self-efficacy leads to self-regulated learning (Schunk & Zimmerman, 1997). In the social-cultural perspective of Vygotsky (1962, 1978) the emphasis is on social foundations and the language of self-regulated learning, as provided by parents, teachers and adults in the family and schools.

The observed correlations (self-efficacy with self-regulating learning and mastery goals, and mastery goals with self-regulating) are consistent with the findings of Pintrich, De Groot (1990); Schraw, Horn, Thorndike-Chirst, Buring, (1995); Greene, Miller (1996); Pintrich (1999); Elliot, McGregor, Gable, (1999). However, while Pintrich (1999) found a negative correlation between performance goals and components of self-regulated learning, the present research indicated that this correlation was weak, but positive, for avoidance performance goals. Individuals have different goals and all of them can have consequences on self-regulating and achievement. For some situations avoiding goals and for others performance goals or mastery goals. In this research all goals related to self-regulating and have role in it.

We proposed that researcher investigate role of perceptions on self-regulating with experimental method or input role of mediator and moderators that effect on perceptions and self-regulating. These findings benefit for teachers in educational situations.

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