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Environmental perceptions, motivational beliefs and self-regulating learning by Iranian high school students

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Abstract

To examine the correlations among environmental perceptions, motivational beliefs, and self-regulating learning of Tehran high school third-year boys, a causal model was used and 685 students were selected by multistage cluster-sampling method. The motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990), Students' Achievement Goal Orientations (Midgley, Kaplan, Middleton, Maehr, Urdan, Anderman, et al., 1998), Students' Perceptions of Classroom Activities (Gentry, Gable, & Rizza, 2002), and Perceptions of Parents Scales (Grolnick, Deci, & Ryan, 1997) were administered. Analysis showed relations among components of self-regulating learning, family environmental perceptions, perceptions of classroom activities, and motivational beliefs. Structural equating modelling indicated the proposed model was acceptable and the fit index was not significant statistically (χ^2 = 123.98, GFI = .97, RSMEA = .044). All paths or structural coefficients of proposed model were significant statistically (P< .01).

Keywords: self-regulating learning, environmental perceptions, and motivational beliefs.

1-Introduction

Self-regulating learning has important consequences for education, therapy and organizational management. Self-regulating include strategies for regulating cognitive processes with which students may control and monitor their learning, including goal-setting, planning, executing, managing, monitoring, self-evaluating and modifying their fallacies (Pintrich, 1999).

The key question in studying self-regulating learning is: what factors are effective on, or related to it. Previous research indicates that those factors may be self-efficacy (Bandura, 1986; Schunk, 1989, Pintrich & De Groot, 1990; Pintrich & Garcia, 1991; Zimmerman, 1999), achievement goals or goal orientations (Pintrich, 1999; Pintrich & Garcia, 1991; Pintrich, 1999; Nichols, 1984; Dweck, 1986; Pintrich & De Groote, 1990; Ames, 1992; Pintrich, 1999), task values (Pintrich, 1999; Eccles & Wigfield, 2002), Students' perceptions of classroom activities

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(Anderman & Midgly, 1997; Church, Elliot & gable, 2001), and Parents' perceptions (Grolnick, et al., 1997, Grolnick & Ryan, 1989).

However, relations among variables reported in previous research are not direct and it has been also argued that goal orientations and self-efficacy, as two mediators, affect the relations between environmental perceptions and self-regulating learning (Schunk & Zimmerman, 1997). Therefore, relations among self-regulating learning, goal orientations and self-efficacy with respect to parents' and classroom perceptions are not a simple one, but involve direct and non-direct relations and effects. However, we have chosen structural equation modelling to study the involved casual relations. Based on the model proposed (Fig. 1), the relations among environmental perceptions and self-regulating learning, with an emphasis on mediating roles of goal orientations and self-efficacy were examined.

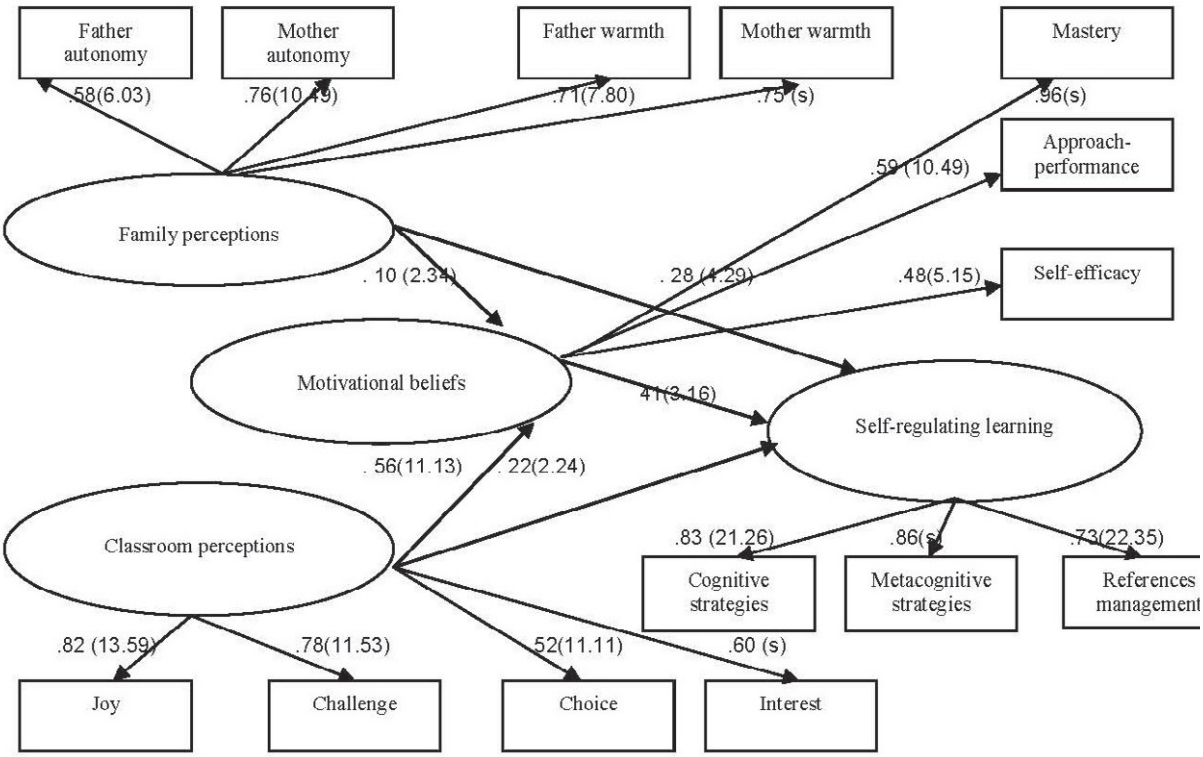
2-Methodology

2-1. Participants

Participants were 685 boys between 14 to 18 years old, from Tehran high schools, selected from a population of 36723, using a multistage cluster-sampling method. In terms of the participants' socioeconomic status (SES), they were selected from three different districts with high, low and middle incomes. 146 boys were registered in public schools and 539 boys in private ones, with higher SES, compared to those of public schools.

2-2. Measurement

To measure the variables, the following paper-pencil inventories were introduced to the participants in groups of 20 to 25: Motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990), Students Achievement Goal Orientation (Midgley, et al., 1998), Students Perceptions of Classroom Activities (Gentry, et al., 2002), and Perceptions of Parents Scales (Grolnick, et al., 1997). These scales had been used by some other Iranian researchers and their validities have been confirmed (Hosayni Nasab & Ramshe, 2000; Khademi & Nowshadi, 2006; Sobhani Nejad & Abedi, 2006). To verify the reliability of the scales, their Cronbach coefficient alpha (α) were calculated, using the data collected from the final administration of the inventories. The alpha was .95 for MSLQ, .93 for SPCA scale, .93 for POPS, and .88 for SAGO scale. Confirmatory factor analysis index, was (RSMA = .055, GFI = .97, χ^2 =767.71) for MSLQ, (RSMA = .048, GFI = .98, χ^2 = 85.93) for SPCA scale, (RSMA = .048, GFI = .97, χ^2 = 139.91) for POPS, and (RSMA = .05, GFI = .94, χ^2 = 366.83) for SAGO scale. After testing all participants, they were scored based on their marks in each subscale.



χ^2 = 123.98, DF = 59, χ^2/DF = 2.10, RMSEA = .044, GFI = .97, AGFI = .95

Figure, 1. Tested model of the structural relations between environmental perceptions, motivational beliefs, and self-regulating learning.

3- Results

Pearson correlations among all variables (autonomy support, involvement and warmth, interest, choice, challenge and joy, self-efficacy, mastery, approach performance and avoidance performance, cognitive, metacognitive and resource management strategies), except parents involvement, were statistically significant pair wise ($p<.05$).

To examine the structural relations based on the proposed model, structural equation modelling test was run, using LISREL package. The indexes of proposed model were acceptable and the obtained χ^2 was not statistically significant. (GFI = .97, AGFI = .95, RMSEA = .044, χ^2 = 123.98, χ^2/DF = 2.10). If GFI and AGFI were above .90, χ^2/df<3, RSMEA< .05, fit indexes of the model would be acceptable and the model would fit. Therefore, the model and the hypotheses are acceptable.

4- Discussion

The analysis of data showed that relations among environmental perceptions with self-regulating learning are affected by motivational beliefs and variables in the model are related to each other. The correlations found in this research (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); Greene, Miller (1996); Pintrich (1999); Elliot, McGregor, Gable (1999). However, while Pintrich (1999) found a negative correlation among performance goals and self-regulating learning components, the present research, indicated that this correlation was weak, but positive for avoidance performance goals. In fact, Pintrich's findings (1999) fit with theory of goal orientation, while the

findings of the present study fit with multiple goals theory, being recently developed (Elliot, 2006; Elliot & Church, 1997). According to that study different achievement goals lead to different results.

However, inconsistent with the findings of Pulknin (Hill, 2001); parents' involvement was not correlated with parents' and classroom perceptions. This finding should be analyzed in different contexts. In regards to other findings, approach performance goals were related to self-regulating strategies (Elliot, 1997; Elliot & church, 1997) and mastery goals were related to self-regulating strategies (Pintrich, 1999). Therefore, the finding of the present study confirmed the multiple goals theory (Greene & Miller 1996; Elliot & Church, 1997; Harackiewicz, Barron, Pintrich, Elliot & Trash, 2002).

Comparison of different groups of boys and girls, males and females, young and adolescence, high school and university students, cultural groups, SES groups, gender groups, professional groups and IQ groups against this model would be beneficial in generalization of the findings of the current study and refinement of its methodological and theoretical foundations. Besides, it may be necessary to develop different models in order to study different motivations or motivational goals. Future research should include more variables in order to develop a more comprehensive model.

References

Ames, C. (1992). Classroom: Goals, structure and motivation. *Journal of Educational Psychology,* 84, 261-71.

Anderman, E.M. & C. Midgley, C. (1997). Changes in achievement goal orientations and perceived classroom goal structures across the transition to middle level schools. *Contemporary Educational Psychology***,** 22*,* 269–98.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, (NJ): Prentice-Hall.

Church, M. A., Elliot, A. J., & Gable, S. (2001). Perception of classroom context, achievement goals and achievement outcomes. *Journal of Educational Psychology*, 93, 43-54.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologists,* 41, 1040-48.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values and goals. *Annual Review of Psychology*, 109-132.

Elliot, A. J. (1997). Integrating "classic" and "contemporary" approaches to achievement motivation: A hierarchical model of approach and avoidance achievement motivation. In P. Pintrich & M. Maehr (Eds.), *Advances in motivation and achievement* (vol. 10, pp. 143-79). Greenwich, (CT): JAI Press.

Elliot , A. J. (2006)**.** The hierarchical model of approach-avoidance motivation. *Motivation and Emotion,* 30 (2), 111-16.

Elliot, A. J., & Church, M. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology,* 72 (1), 218-32.

Elliot, A. J., McGregor, H. A., & Gable, S. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis*. Journal of Educational Psychology*, 91 (3), 549-63.

Gentry, M., Gable, R. K., & Rizza, M. G. (2002). Students perceptions of classroom activities: Are there grade-level and gender differences. *Journal of Educational Psychology,* 94, 539-44.

Greene, B., & Miller, R. (1996). Influence on achievement: Goals, perceived ability, and cognitive engagement. *Contemporary Educational Psychology,* 21 (2), 181-92.

Grolnick, W.S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: the self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135-61). New York: Wiley.

Grolnick, W. S., & Ryan, R. M. (1989). Parent styles related to self-regulating and efficacy in school. *Journal of Educational Psychology,* 81 (2), 143-54.

Harackiewicz, J. Barron, K., Pintrich, P. R., Elliot, A. & Trash, T.M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology,* 94 (3), 638-45.

Hill, N.E.(2001). Parenting and academic socialization as they relate to school readiness: The roles of ethnicity and family income. *Journal of Educational Psychology*, 93 (4), 686-97.

Hosayni Nasab, D. and Ramshe, S. M. H. (2000). Investigating among self-regulating components with intelligence. *Journal of Human and Social Sciences* (Shiraz University), 31 (1), 85-96.

Khademi, M. and Nowshadi, N. (2006). Studding of relations among goal orientation with self-regulating learning and academic performance. *Journal of Human and Social Sciences* (Shiraz University), 49 (4), 63-78.

Midgley, C., Kaplan, A., & Middleton, M. Maehr, M. L. Urdan, T. Anderman, L. H. Anderman, E., & Roeser, R. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology,* 23, 113-31.

Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research,* 31 (6), 459-70.

Pintrich, P. R., & De Groot, E. (1990). Motivational and self-regulated learning component of classroom academic performance. *Journal of Educational Psychology,* 82 (1), 33-50.

Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in college classroom. In M. L. Maehr, & P. R. Pintrich (Eds.), *Advances in motivation and achievement: goals and self-regulatory processes* (V. 6, pp.371-402).Greenwich, (CT): JAI Press.

Schunk , D. H. (1989). Social cognitive theory and self-regulated learning. In B.J. Zimmerman & D.H.schunnk (Eds.), *Self-regulated learning and academic achievement: Theory, research and practice* (pp.83-110). New York: Springer-Verlag,

Schunk, D. H., & Zimmerman, B. J. (1997). Social origins of self-regulatory competence. *Educational Psychologists,* 32 (4),195-201.

Sobhani Nejad, M. and Abedi, A. (2006). Studding the relations among self-regulating learning with motivation of academic performance. *Quarterly of Psychology* (Tabriz University), 1 (1), 79-97.

Zimmerman, B.J. (1999). Commentary: toward a cyclically interactive view of self-regulated learning. *International Journal of Educational Psychology Research,* 31 (6), 545-51.