

EXAMINING THE ROLE OF TEACHER' MOTIVATIONAL STYLE IN STUDENTS' MOTIVATIONAL ORIENTATION

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Abstract

Motivational orientation is a pattern of beliefs that produces different ways of approaching, engaging in, and responding to achievement situations. Teachers can influence students' Motivational orientation through the motivational style they use. This study aim was to examining the role of autonomy-supportive versus controlling motivational style in students' motivational orientation in mathematics. In first stage, a group got easy match test and B group had difficult test. In second stage, all subjects got a same math test in average difficulty. Results of tow-ways ANOVA analyses shown that students with autonomy support perception solved more problems in second test and shown mastery orientation. Such results were not found for subjects who had easy test at first stage. Results recommend autonomy-supportive motivational style should be encouraged in students, if they will be encountering with difficult tasks.

Key Words: *Mathematic Achievement, Motivational Orientation, Motivational style; Self-Determination theory.*

1. Introduction

Motivational orientation is a pattern of beliefs that produces “different ways of approaching, engaging in, and responding to achievement situations [1]. Dweck [2] observed that many talented students do not seek challenges. She noticed that they sometimes struggle to cope with failures and question, if not condemn their ability, when faced with setbacks. However, many less-accomplished students however were not affected at all by failures and continued to seek challenges even after setbacks. This led Dweck to believe that these behaviors were not the result of actual ability levels. Dweck and her colleagues differentiated between two types of behaviors in achievement contexts: (1) a mastery oriented behavior pattern, and (2) a helpless behavior pattern. Mastery oriented learners wanted to acquire new competencies and to be able to have command of new situations. The information processing of mastery-oriented learners was therefore focused on the surveillance of learning process and the search for new strategies that were useful in attaining this learning goal. When an obstacle confronted this learning process, this was seen as an indication that the wrong strategy had been applied [3; 4].

However, a helpless pattern learner was plagued by various maladaptive behaviors. Helpless learners did not attribute their successes to action taken, but rather explained them predominantly through uncontrollable causes such as luck or task difficulty. When helpless-pattern learners were encountered by failure, they reduced their aspiration, experienced negative emotions, demonstrated lower levels of persistence, and gave up the task easily [5; 6]. According to Dweck [7] helpless-pattern, learners have limited information-processing capacity. They may direct their attention to the behavior itself, as well as the perception and reactions of others.

In the present study, we examine motivational factors expected to play role in students' motivational orientation and academic achievement. Specifically, we argue that students who their

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teacher motivational style is autonomous supportive seems maintain or enhance mastery orientation in responding to achievement situations, relative to students who are directed or controlled by forces outside the self. That is, we predict that when people are intrinsically motivated or autonomously extrinsically motivated, they will not be worry about their failures and others reactions, they watch failure as a part of achievement and direct their attention to achievement situations.

SDT [8], theorizes that a continuum of different types of motivation exists, depending on the level of self-determination that an individual possesses. Individuals are intrinsically motivated when they engage in an activity for the inherent satisfaction that they derive from the activity. They are extrinsically motivated when they engage in an activity for rewards attained or punishments avoided through the activity. However, within extrinsic motivation there is a continuum. External regulation is when the behavior is controlled by external conditions. Interjected regulation is when the external conditionality has been internalized to some extent. Indentured regulation is when the individual consciously values the outcomes of the behavior. Integrated regulation is when the outcomes of the behavior are fully congruent with the individuals' other values. External and interjected regulations are relatively controlled forms of regulation, whereas indentured, integrated, and intrinsic regulation is relatively autonomous forms of regulation. Finally, motivation refers to a lack of either intrinsic or extrinsic motivation to partake in an activity. A motivated individual perceives no worthwhile reasons for pursuing an activity and hence is completely lacking in self-determination.

SDT proposes that human beings have innate psychological needs for autonomy, competence and relatedness. Intrapersonal and interpersonal contexts that support the satisfaction of these needs will promote a person's enjoyment of activities and the autonomous self-regulation of behaviors [9]. According to Gagne [10], people are more likely to be intrinsically motivated, doing an activity simply for the enjoyment they derive from it, when they can freely choose to pursue an activity (autonomy/choice), when they master the activity (competence) and when they feel connected and supported by significant people, such as a manager, a parent, a teacher or teammates (relatedness).

The motivating style of one person influences the motivation, emotion, learning, and performance of others [11]. A teacher's motivating style toward students can be conceptualized along a continuum that ranges from highly controlling to highly autonomy-supportive [12]. Autonomy-supportive teachers facilitate, whereas controlling teachers interfere with the congruence between students' self-determined inner motives and their classroom activity. Autonomy-supportive teachers facilitate this congruence by identifying and nurturing students' needs, interests, and preferences and by creating classroom opportunities for students to have these internal motives guide their learning and activity. In contrast, relatively controlling teachers interfere with students' inner motives because they tend to make salient a teacher-constructed instructional agenda that defines what students should think, feel, and do. To shape students' adherence toward that agenda, controlling teachers offer extrinsic incentives and pressuring language that essentially bypass students' inner motives.

Controlling environments produce an external locus of causality [13], thereby frustrating people's basic need for self-determination or autonomy, that is, their tendency to engage in a willing and volitional manner in an activity. Studies among children have indicated that pressuring communication styles undermine persistence [14]. In school settings, students with autonomy-supportive teachers, compared to students with relatively controlling teachers, show greater perceived competence, and intrinsic motivation, emotionality that is more positive and greater conceptual understanding, higher academic performance, and greater persistence in school [15].

Autonomy-supportive teachers are able to facilitate these positive educational and developmental outcomes in their students because they find ways to involve and satisfy their students' psychological needs (for autonomy, competence, and relatedness) during instruction [16; 11].

Given that motivational orientation is defined as a ways of approaching, engaging in, and responding to achievement situations, researchers reasoned that it should be greater master orientation when students are autonomously motivated for learning than when they are controlled. The linkage between self-determined versus controlled motivations and motivational orientation has been suggested in this study. In summary, our aim in this article is to examine the role of autonomy-supportive versus controlling communication styles status in students' and motivational orientation.

2. Method

2.1. Participants

The initial student sample contained 132 tenth graduate female students. However, students who did not complete the entire questionnaire were excluded from the analyses, as were students whom their rating of academic self-regulation questionnaire was not show their perception of teacher's motivational style. Then, 60 students were selected randomly; include 30 students with autonomy supportive perception of their teachers and 30 students with controlling perception of their teachers.

2.2. Measures

Firstly, all measures were translated into Persian and Cronbach's alpha coefficients were calculated to assess their internal reliability.

Academic Self-regulation Questionnaire. Firstly, scale was translated into Persian and Cronbach's alpha coefficients were calculated to assess their internal reliability. Students' perception of their teacher motivational style was assessed using Ryan and Connel [17]. The students in the present study responded to 32 items (nine items for external regulation and nine items for interjected regulation and seven items for indentured regulation and seven ones for intrinsic motivation) measured on scales ranging from 1 (strongly disagree) to 4 (strongly agree). The number of subscales in the particular scale can be combined to form a Relative Autonomy Index (RAI). To form the RAI, the external subscale is weighted -2, the interjected subscale is weighted -1, the identified subscale is weighted +1, and the intrinsic subscale is weighted +2. $RAI = 2 \times \text{Intrinsic} + \text{Identified} - \text{Interjected} - 2 \times \text{External}$. If $RAI < 0$, perceived locus of causality will be extrinsic, and If $RAI > 0$, perceived locus of causality will be intrinsic. The reliability of this instrument (Cronbach's alpha) in this survey was .77.

Motivational orientation. The number of solved problems in third test was used to show subjects motivational orientation. This test included 10 math problems. All problems' difficulty coefficient was average.

2.3. Procedure

The experiment took place during the participants' regular classes, which increases its ecological validity. Teachers obtained permission for the study. Second author attended in participants' regular classes and used standardized instructions. Subjects were assured about the confidentiality of their answers. The questionnaire was administrated with the absence of teachers. After answering students' questions, the administrators asked the students to complete the questionnaire. Then, based on questionnaire data, subjects were divided to two groups; both groups included 15 subjects with autonomy supportive perception and 15 subjects with controlling perception. Next, subjects received two mathematic tests. All problems difficulty coefficient have been assessed previously. Subjects in first group (A) participated in a mathematic test which included 5 difficult problems, second group (B) got another test include 4 easy problems and 1

difficult problem. Finally, all subjects were asked to participate in a test include 10 mathematic problem with average difficulty coefficient. Participation in third test was voluntary.

3. Results

At first, descriptive statistics were computed. In addition, descriptive statistics were computed followed by analysis of variance (ANOVA) and Follow-up contrast analyses with Turkey test. Table 1 presents the means and standard deviations of the two groups.

Table 1. The means and standard deviations of the four experimental conditions

	Group A			Group B		
Autonomy supportive	<i>M</i> : 6.37	<i>S</i> : 1.93	<i>n</i> : 13	<i>M</i> : 9.33	<i>S</i> : 0.81	<i>n</i> : 15
Controlled	<i>M</i> : 4.21	<i>S</i> : 0.77	<i>n</i> : 13	<i>M</i> : 8.46	<i>S</i> : 1.61	<i>n</i> : 13

A tow-way ANOVA indicated that participants' degree of motivational orientation significantly differed across conditions (Table 2).

Table 2. A tow-way ANOVA

	SS	df	MS	F	Sag
SS _A	43.61	1	43.61	13.88	0.000
SS _B	29.64	1	29.64	9.43	
SS _{AB}	336.56	1	336.56	107.18	
SS _W	152.82	50	3.14		
SS _T	559.63	53			

The three F value was significant, $F(1, 101) = 6.85, p < .001$.

Table 3. Follow-up contrast analyses with Turkey test

	<i>M</i> ₁ : 6.37	<i>M</i> ₂ : 4.21	<i>M</i> ₃ : 9.33	<i>M</i> ₄ : 8.46
<i>M</i> ₁ : 6.37	-	2.16*	2.96*	2.09*
<i>M</i> ₂ : 4.21	-	-	5.12*	4.25*
<i>M</i> ₃ : 9.33	-	-	-	0.87
<i>M</i> ₄ : 8.46	-	-	-	-

* $P < .005$. $HSD_{0.005} = 1.48$

Follow-up contrast analyses with Turkey test (see Table 3) indicated that participants with autonomy supportive perception ($M = 5.67, SD = 1.05$) experienced more subjective vitality as autonomous compared with participants in other conditions. The loser participants in controlling condition ($M = 2.45, SD = 0.99$) experienced least subjective vitality compared with other conditions. Moreover, there is no significant difference between subjective vitality of the loser participants in autonomy supportive condition with winner participants in controlling group, but the difference between the loser participants in autonomy supportive and controlling group is significant. Moreover, an interaction effect did not emerge in the present study.

4. Discussion

Based on SDT, teacher motivational style could explain variance in children's motivation. In study, we tested the hypothesis that conditions designed to foster an autonomy supportive conception of teacher motivational style would result in greater mastery motivational orientation relative in students to conditions conducive to controlling perception. It was predicted that motivational orientation would be differentially influenced by type of teacher motivational style. Results supported the hypothesis. Results indicated that students with more autonomous reasons shown more mastery orientation, whereas those with more controlled reasons did not. These

findings are consistent with Vallerand, Fortier, & Guay [18]. The comparison of the participants under an autonomy-supportive perception with participants with controlling perception provided interesting insight into the precise impact of an autonomy-supportive versus controlling motivational style as well as previous test difficulty status. Specifically, the provision of facilitating variable (autonomy-supportive motivational style) is enhancing mastery orientation compared with the controlling motivational style, whereas the provision of debilitating factors increasing students' helplessness orientation. However, this finding was seen when students got difficult mathematic test before final test.

Based on Dweck [7], we reasoned that difficult test or task experience would activate motivational orientation. At first group, students were asked to solve five high difficult math problems, which could activate their motivational orientation. On other hand, according to SDT, students' perception of teacher motivational style would play role in determinate which motivational orientation will be shown. Autonomy supportive perception triggers mastery orientation because students regulate their participation in a more autonomous manner, knows their efforts are more important than result; failure is accepted and seen as learning process. A controlling motivational style perception promotes helplessness orientation because. Controlling condition produces an external perceived locus of causality by frustrating students' basic need for self-determination or autonomy, that is, their do not engage in a willing and volitional manner in an activity. They are worry about their performance because of others' reaction; do not see contiguity between their behavior and consequences.

5. Conclusion

The present research shows how students perceive teacher motivational style play role in their motivational orientation. The findings suggest that autonomy supportive classroom linking students' mastery orientation rather than controlling classroom yields important benefits: It promotes a more mastery orientation in encountering with failure. Such results were not found for easy task or test, however. It appears that, perceive teacher motivational style dose not play important role in students motivational orientation when they are encountering with easy tasks.

The current study is not without its limitations. First, we used a single measure of motivational orientation. Second, this study only was conducted on mathematic. Third, we did not manipulate teacher motivational style, so we can get casual relationships. Hence, future research might examine whether the present findings among female students and mathematic could be generalized across male students and different types of activities. Fourth, the cross-sectional nature of research design which only allowed for a slice-in-time study. Fifth, it was also not within the scope of this study to look at school and developmental differences due to the sample size and homogeneous age and sex group of the students involved in the study. Hence, future research might examine whether the present findings among female students and mathematic could be generalized across male students, ages and different types of activities. In addition, is recommended, future research manipulating teacher motivational style.

Despite the limitations, the endings from the present study have important implications. From a practical point of view, since autonomy-supportive motivational style predict more mastery orientation than controlling style, autonomy-supportive motivational style should be encouraged in students. Autonomy-supportive motivational style may be developed by providing appropriate expression of choice and support, promote class structures that are autonomy-supportive and curriculum that are interesting and relevant to the students. In addition, Deci and Ryan [19; 20] recommended that to facilitate autonomous regulation, teacher may provide students with the required information regarding a skill or tactic and then allowing the students choice in the way they wish to execute the task, or the scope that they like to adopt regarding the tactics and game plan. Other practical suggestions also include establishing peer-learning groups in which students play different roles (such as demonstrating or refereeing) in the lesson.

References

1. Jesús Alonso-Tapia, Juan A. Huertas, & Miguel A. Ruiz. (2010). *On the Nature of Motivational Orientations: Implications of Assessed Goals and Gender Differences for Motivational Goal Theory*. The Spanish Journal of Psychology, Vol. 13 No. 1, 232-243.
2. Dweck, C. S. (1998). The development of early self-concepts: Their relevance for motivational processes, In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span*, (pp. 257-280).
3. Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
4. Heyman, G. D., & Dweck, C. S. (1992). Achievement goals and intrinsic motivation: Their role in adaptive motivation. *Motivation and Emotion*, 16, 231-247.
5. Heyman, G. D., & Dweck, C. S. (1998). Children's thinking about traits: Implications for judgments of the self and others. *Child Development*, 69, 392-403.
6. Kamins, M. L., & Dweck, C. S. (1999). Person vs. process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835-847.
7. Dweck, C. S. (1999). *Self Theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press Taylor and Francis.
8. Cohen, S., Alper, C. M., Doyle, W. J., Treanor, J. J., & Turner, R. B. (2006). *Positive emotional style predicts resistance to illness after experimental exposure to rhinovirus or influenza A virus*. *Psychosomatic Medicine*, 68, 809-815.
9. Ryan, R. M., & Deci, E. L. (2000). *Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*. *American Psychologist*, 55, 54-56.
10. Gagne, M. (2003). *The role of support and autonomy orientation in prosocial behavior engagement*. *Motivation and Emotion*, 27, 199-223.
11. Reeve, J. (2002). *Self-determination theory applied to educational settings*. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 193-204). Rochester, NY: University of Rochester Press.
12. Deci, E. L., Schwartz, A. J., Sheinman, L., & Ryan, R. M. (1981). *An instrument to assess adults' orientations toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence*. *Journal of Educational Psychology*, 73, 642-650.
13. de Charms, R. (1968). *Personal Causation: The Internal Affective Determinants of Behavior*. New York, NY: Academic Press.
14. Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). *Motivation in education: The self-determination perspective*. *Educational Psychologist*, 26, 325-346.
15. Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). *Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout*. *Journal of Personality and Social Psychology*, 72.
16. Hardre, P. L., & Reeve, J. (2003). *A motivational model of rural students' intentions to persist in, versus drop out of, high school*. *Journal of Educational Psychology*, 95, 347-356.
17. Ryan, R. M., & Connell, J. P. (1989). *Perceived locus of causality and internalization: Examining reasons for acting in two domains*. *Journal of Personality and Social Psychology*, 57, 749 - 761.
18. Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). *Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout*. *Journal of Personality and Social Psychology*, 72, 1161-1176.
19. Deci, E. L., & Ryan, R. M. (1991). *A motivational approach to self: integration in personality*. In R. Deinstbier (Ed.), *Perspectives on motivation*. Nebraska symposium on motivation, Vol. 38 (pp. 237-288). Lincoln, NE: University of Nebraska Press.
20. Deci, E., & Ryan, R. (Eds.), (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

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