

Effects of Traditional and Descriptive Evaluation on Student Achievement Goals

Farhad Saljoghi^{1,*}, Mohammed Saeed Abd Khodaei¹, Mahbobeh Delaram Ahmadi¹, Fatemeh Poodineh Sabor⁴, Fatemeh Rahnama⁵

1 Department of Psychology, Ferdowsi University of Mashhad, Iran;

2 Department of General Psychology, Islamic Azad University of Torbat, Iran.

*Corresponding author. Tel: 989015121920; E-mail: farhad.saljoghi@yahoo.com

Citation: Seljoghi F, Khodaei MSA, Ahmadi MD, et al. Effects of Traditional and Descriptive Evaluation on Student

Achievement Goals. Electronic J Biol, 12:4

Received: June 20, 2016; Accepted: July 11, 2016; Published: July 18, 2016

Research Article

Abstract

Aim: This study examined the impact of traditional and descriptive evaluation on student achievement goals son fifth grade zones 3 and 5 were conducted in Mashhad.

Methods: This study included descriptive census of all 108 students and 118 students from schools at the same level they were not covered by the descriptive evaluation plan were selected. Measuring instruments used in this study, questionnaire development goals. Independent t test and multivariate analysis of variance (MANOVA) were used to analyze the data.

Results: The results showed that group of traditional descriptive variables were significantly different achievement goals. Further analysis showed that mastery goal orientation of students descriptive significantly higher than students in regular schools at the same level it and the functional orientation - avoid students were significantly less than normal students and between performance-approach orientation students traditional evaluation descriptive evaluation group was not significant.

Keywords: Descriptive evaluation; Traditional evaluation; Achievement goals.

1.Introduction

Evaluation has been considered one of the most important factors of success in educational system and always experts has been trying valid measurement tools, utilized in evaluating and using the results as basis for planning to exploit deficiencies and improve student achievement .Today as era of memory-oriented teaching and learning method for students to fill out mental storage and reclaim it took examinations emphasized. In the words of Jean Piaget, main purpose of education train people who can think of innovation, not people to repeat

what they have been told to rely. Another goal is to foster critical thinking, education of people who investigation is not what they want. Students should equip increasingly knowledge, skills and attitudes that themselves with developments and changes in human society in various fields coordinate confusing. What are certain no immediate plans to change and new tasks and functions include education and training objectives, content, teaching-learning and evaluation methods, student achievement, a new generation for life in society can not be changed and is today and tomorrow will change education [1].

In this regard, the Office of education and educational evaluation former Ministry of Education offered according to new approaches to evaluation (cognitive and productive tendency) after many studies and in response to the verdict at a meeting of Supreme Council 674 dated 05.02.2002 regarding conversion of scale quantitative (20-0) measure qualitative, descriptive evaluation plan. This project is qualitative model that tries unlike conventional models, evaluation criteria, rather than quantitative approach through curriculum due to depth and quality of education and student learning and provides description of their status. In this type of evaluation is part of the teachinglearning process. Because it aims to improve and reform education determines the amount of success in academic achievement [2]. Due to the fact that in the evaluation process and learning how to learn is more important than efficiency and learning outcomes, first evaluation as part of ongoing process of teaching and learning and developmental aspects that gradual and phased process of teaching and learning is evaluated from different perspectives. Secondly, this type of assessment based on learner performance measured and assessed through using the knowledge and skills of students during practice [3]. Feedback and descriptive record of solutions is discussed in descriptive evaluation [4]. In descriptive evaluation, self-assessment and peer assessment is also of great importance. Self refers to engage the



learner in the judging of learning way to increase role of students as active participants in learning [5].

It was suggested that peer assessment, student or another function in judgments of students engaged in learning and in the evaluation process.

Topping et al. stated that peer evaluation gives students opportunity to compare their work with work of other groups' process that will result to increase in metacognitive awareness and skill development, along with the self-assessment [6]. The main purpose of these methods is to create sense of responsibility towards their learning peers [2].

Berry believed that students learn these methods on their own learning and other regulatory measure and monitor and supervise it [7]. So we can expect that students by using these methods in addition to academic achievement benefit from higher metacognitive knowledge. One method of assessing performance given in descriptive evaluation is assessment workbook. Saif have commented on definition of workbooks: workbooks planned and targeted collection of evidence that how learning progress and the steps it has taken to get to be included [8]. The importance of workbooks for the development of meta-cognitive skills those learners with knowledge of learning, thinking and learning process and how to apply knowledge and skills in problem solving, can learn to do thinking and guidance and through self-regulation and monitoring of their mental processes improve their progress [8,9]. Therefore expected that descriptive evaluation using the above strategies influence on students' metacognitive awareness and is different from the traditional evaluation. On the other hand, studies have shown that classroom, school, different perceptions that each student can have its structure and can affect the direction of target [1,10,11]. Teacher class structure based on goals and values are formed, but its impact on students' motivation and performance. depends on how their perception of classroom. Teacher in class by creating mastery structure will emphasize importance of learning and intellectual development while building the emphasis on getting a good grade or class performance will be the right answer. In the past, many studies have focused on two types of perception of goal. But Midgley et al. three-dimensional framework has been developed for perception of class [1,12]. Under this framework, mastery describes environment in which learning is important, hard work is important and students are able to learn and work hard to succeed. Structure function approach purpose describes environment in which student understand the environment are told that being successful means taking external rewards, showing ability and better performance than others. Performance-avoidance describes the environment in which environment do not display being successful means lack of skills or poor in terms of reaching and not making mistake in front of other students. The class structures or focused on task mastery,

understanding lesson more important than score, performance and appearance are parroting lessons [13].

Class atmosphere about understanding, learning and stresses that efforts can make students also pursue these goals, lead to mastery goal orientation [13]. Ames also says: When evaluation with good expectations for improvement, or mistakes as learning opportunities are the path to success, orientation is enhanced [13]. Time performance orientation finds that teachers foster the proper functioning and avoid pushing the wrong. Heavy emphasis on the evaluation of the student's score is likely to lead to functional outcome and the avoidance approach enhances the performance targets, but the emphasis on external evaluation of mastery likely to follow loosen its value and therefore has negative relationship with mastery goals [13]. Hasman et al. also conducted research as formative assessment and goal orientation show that formative assessment can increase and decrease mastery orientation, performance orientation and personal goal orientation of students significantly associated with their perceptions of the goals of teachers to read [14,15]. In descriptive evaluation with regard to emphasis on formative assessment to final evaluation, evaluation as part of the process of teaching and learning and the results are not used in order to improve teaching and learning for students scoring [2]. As result of mistakes as learning opportunities considered being on path to success (mastery structure), it is expected to strengthen as result of mastery and performance objectives will be reduced. According to theory and research mentioned above purpose of this study the effect of descriptive evaluation on student achievement is compared with the traditional evaluation purposes.

2.Methods

This research is functional and due to the lack of involvement in the creation of self-descriptive data of the survey. For the present study areas 3 and 5 education students in Mashhad city in District 3, jolly boys 'schools (two classes) and secondary schools Razzaghi (one class), area 5, Saberi boys' school (one class) and secondary schools in Adel (one class) follow instructions descriptive evaluation. The total number of samples was 226 fifth grade students. The 108 students in group descriptive evaluation and traditional evaluation were 118 students in the group. Due to limitations under the schools descriptive evaluation plan, census of all students in selected classes were eligible, non-eligible schools plan (traditional evaluation) purposive sampling took place. According to expert suggestions primary areas 3 and 5 for the similarity of samples (similarities of culture, environment, education and domestic students) in schools split of classes for the second time in random order and in schools, a school sessions were selected.

ISSN 1860-3122 - 329 -



3.Tools

3.1 Midgley et al. [1] Questionnaire of achievement goals (1998)

Kareshki evaluated after translating of questionnaire and its validity was confirmed by experts [16]. Inventory goal orientation Friedel et al. has 18 items and 3 in test mastery goal orientation, performance-approach and performance-avoidance [1]. Respond to questions based on seven-point Likert. Response of question meant that 1 it did not apply in its case and 7 means being honest answer choices that topic or question about them. Each person will have three scores goal orientations. Questions 1 to 6 of mastery goal orientation, questions 7 to 12 of functional orientation - approach and performance-avoidance Questions 13 to 18 are related to orientation. A minimum score in each subtest will earn 7 and the maximum score is 42. Between 0.70 and 0.84 reliability in tests in original reference has been reported. Reliability of the questionnaire in the final run 0.87 and 0.87 respectively its subtests, 0.84 and 0.76 is obtained. Kareshki test validity of assessment tools used confirmatory factor analysis to goal orientation [16]. Confirmatory factor analysis of indicators of performance goal orientation showed validity of tool. (RSMA=0.05, GFI=0.94 and df=115 and X2=366.83) in total index derived from implementation of Cronbach's alpha and confirmatory factor analysis, validity and reliability indicated. In this study using Cronbach's alpha coefficient for the total test 0.88 and reliability in tests which are 0.88, vary from 0.85 to 0.80 is obtained [17].

4.Procedure

This research was conducted in following method; First, schools are subject to descriptive evaluation

plan at the level of schools in zones 3 and 5 regions were identified with the help of experts' primary school and received permission to visit them. Then, while coordinating with school administrators and teachers' groups' descriptive and traditional evaluation in May 2010, questionnaire based on relevant guidelines and in same condition, fifth grade students was conducted. Students in two sessions, each session lasting 40 to 50 min respond to all questionnaires.

5.Resuts

In Table 1, the mean and standard deviation of variables metacognitive knowledge and student achievement goals under the traditional evaluation plan and descriptive evaluation of students is presented.

Table 1 compares mean of two groups in terms of development goals suggest that mean of mastery goal orientation groups more descriptive evaluation of traditional evaluation and orientation mean performance - approach and performance-avoidance in the traditional evaluation is more than descriptive evaluation. To determine the difference between the groups of student's descriptive evaluation plan and traditional evaluation in variable achievement goals, multivariate (MANOVA) was conducted and scores mastery goal orientation, performance-approach and performance-avoidance, as dependent variables were entered into the analysis. Multivariate analysis showed that among the traditional description of goals achievement, there is a significant difference $(P \le 0.001 \text{ and df } (3.222) = 14.445 \text{ and } \lambda = 0.817)$. The other significant multivariate analysis of variance was used each goal orientation.

Bonferroni method at 0.017 was used To control the Type I error analysis. As can be seen in Table 2, there

 Table 1. Descriptive statistics by type of evaluation.

		Group descrip	tive evaluation	Traditional evaluation group		
		Mean	SD	Mean	SD	
Mastery goal orientation		24.09	5.62	30.63	6.57	
Performance-approach orientation	goal	33.76	6.83	33.91	5.42	
Performance-avoidance orientation	goal	23.30	8.25	30.46	8.20	

Table 2. Univariate analysis of variance in achievement of goals.

		SS	DF	MS	F	Sig.
Between groups	Mastery goal orientation	673.90	1	673.90	16.88	0.000
	Performance approach goal orientation	1.22	1	1.23	0.03	0.86
	Performance avoidance goal orientation	2625.57	1	2625.58	38.06	0.000
Error	Mastery goal orientation	8442.40	224	37.69		
	Performance approach goal orientation	8425.71	224	37.61		
	Performance avoidance goal orientation	15451.98	224	68.98		
Total	Mastery goal orientation	9116.30	225			
	Performance approach goal orientation	8426.94	225			
	Performance avoidance goal orientation	18077.55	225			

ISSN 1860-3122 - 330 -



was significant difference between the groups traditional descriptive and goal orientation mastery (p \leq 0.005 and df (1.224)=16.88 and objective performance-avoidance (p \leq 0.005 and df(1.224)=38.06, but according to Table 2 can be seen significant differences between groups and cross traditional functional orientation-approach (p \geq 0.017, df (1.224)=0.033).

In total, according to independent t-test results showed no significant difference between mean scores of student achievement targets were descriptive and traditional designs. So that students' mastery goal orientation scores significantly higher than students in traditional evaluation plan to be descriptive and the mean score performance-avoidance goal orientation students descriptive significantly lower than students in traditional evaluation was obtained. However, the mean scores of students aim for less descriptive, but this difference was not significant traditional evaluation of students.

6.Discussion and Conclusion

The overall aim of this study was to investigate effects of traditional and descriptive evaluation on student achievement goals. Multivariate analysis of variance test findings in this study also indicated that among the goals of student achievement assessment groups descriptive and traditional evaluation there is significant difference. We therefore conclude that descriptive evaluation on student achievement goals Dard.ntayj impact analysis of variance Univariate analysis of variance output for each of the goals of progress showed that: 1. myangyn scores mastery goal orientation of students' eligible descriptive evaluation plan significantly more than mean scores of students in traditional evaluation group. This is consistent with finding of Ames and Archer [14], Ames [13]; Church et al. [18] and Husman et al. [15]. Ames and Archer believed that the purpose of an environmental motivation, cognitive engagement and achievement are effective [14]. This structure is purpose of the evaluation methods, techniques grouping, type of control and autonomy and assignments that emphasize on specific progress targets. When the evaluation with good expectations for improvement, or 'mistakes as learning opportunities are on the path to success, mastery orientation is reinforced. performance Education finds that teachers' orientation when pushing the proper functioning and avoiding mistakes. A strong emphasis on the evaluation of the student's score is likely to lead to functional outcomes [14], performance objectives - to promote approach and avoidance, but emphasis on external evaluation pursuit of mastery likely to loosen its value. Descriptive evaluation approach given that emphasis on formative evaluation to final evaluation. evaluation as part of the process of teaching and learning and its results are not used to improve teaching and learning for students scoring and mistakes as learning opportunities considered to be in the path to success and this would be consistent with mastery class structure that focuses on learning

and mental development. Church et al. [18] in their study also showed that focusing on evaluation (how far perception that teachers emphasize importance score and performance evaluation in class) negatively correlated with orientation of mastery and positive relationship with orientation performanceapproach and performance-avoidance goals [19,20]. Husman et al. [15] also showed that formative evaluation to increase mastery orientation and the orientation of decrease performance. Hejazi and Naghsh [21] also showed that mastery evaluation (perception of good student of that type of evaluation that focuses on learning) was significantly associated with mastery goals. Univariate analysis of variance showed a significant difference between scores of objective performance-avoidance goal orientation performance-approach students under traditional evaluation plan descriptive evaluation with students is not significant. With finding of Ames and Archer [14], Ames [13], Church et al. [18] was not consistent.

The findings of this study may be the theory of multiple targets that are a few years, discussed and accepted is consistent [20]. According to multiple targets people who for various reasons are trying to target only a specific set of objectives pursued or not. At the same time they have to get the approval of others, as well as skill and mastery over the content or skill work and target represents weakness not progress goals [21-25].

The schools at the level of schools included in this study for descriptive plan, efforts were fairly large. However, caution about the level of schools is necessary to compare and interpret the results.

Statistical limited to selected schools in district 3 and 5 Mashhad and at the same level with them. Thus, the findings of this study can be generalized only to societies by caution.

By permission of the Supreme Council of Education schools that have implemented necessary facilities and manpower; therefore, generalization of the results to other schools, which do not have these features should be cautious.

7. Suggestions

- In the future research to examine gender differences, areas of education and age of the subjects to be addressed.
- To Increase the generalizability of the results are better in future research, the population of the whole province be considered.
- In the future research, experimental or quasiexperimental research variables are examined.
- In the future studies evaluating the effect of other variables such as perception and selfregulation and class structure are examined.

ISSN 1860-3122 - 331 -



References

- [1] Friedel JM, Cortina KS, Thurner JC, Midgley C. (2007). Achievement goals, efficacy beliefs and coping strategies in mathematics: The role of perceived parent and teacher goal emphases. *Contemporary Educational Psychology.* **32:** 438-458.
- [2] Hassani M, Ahmedi H. (2005). Descriptive evaluation of the new model in educational evaluation. Tehran: School.
- [3] Ahmadi GH. (2003). The status and role in the teaching and learning process related evaluation of educational achievement. Tehran: Proceedings of the First International Conference on Educational Evaluation, Tehran: Office of Academic and Educational Evaluation.
- [4] Rezaei A, Saif A. (2006). The effect of descriptive evaluation of cognitive, affective and psychomotor students. Educational innovations. 18: 11-40.
- [5] Boud D, Falchikav N. (1989).Quantitative studies of self-assessment in higher education:acritical analysis of findings. *Higher Education*. 18: 529-549.
- [6] Topping KJ, Smith EF, Swanson I, Elliot A. (2000). Formative peer assessment of academic writing between postgraduate students. Assessment and Evalution in Higher Education. 25: 149-167.
- [7] Berry R. (2005). Entwining feedback, self, and peer assessment. Academic Exchang Quaterly. 9: 225-230.
- [8] Saif A. (2008). Measurement processes and products of learning: the old ways and the new. Tehran: Doran Publications.
- [9] Urdan T. (2004). Predictors of academicce seifhandicapping and achievement: Exammining achievement goals, classroomgoal structures, and culture. Journal of Educational Psychology. 96: 251-264.
- [10] Wolters J. (2004). Avancing achievement goal thoary: Using goal structures and orientations to precdict students motivation, cognition and achievement. *Journal of Educational Psychology.* **96**: 236-250.
- [11] Green BA, Miller RB, Crowson HM, Duke BL, Akey KL. (2004). Predicting high school students, cognitive, engagement and achievement: Contributions of calassroom perceptions and motivation. Contemporary Educational Psychology. 29: 462-482.
- [12] Mohsenpour M. (2009). The perception of class goals and goal orientation predicted progress in the first

- year high school students learning strategies. *Journal of Education*. **99:** 144-124.
- [13] Ames C. (1992). Classrooms:Goals structures and studend motivation. *Journal of Educational Psychology*. 84: 261-271.
- [14] Ames C, Archer J. (1988). Achievement goals in the classroom: Students strategies and motivation processes. *Journal of Educational Psychology*. 80: 260-267.
- [15] Husman J, Brem S, Duggan MA. (2005). Student goal orientation and formative assessment. Academic Exchange Quarterly. 9: 225-238.
- [16] Kareshki H. (2008). The role of goal achievement in learning component of self-regulation. *New Cognitive Science*. 3: 21-13.
- [17] Black P, Wiliam D.(1998). Assessment and classroom learning. Assessment in Education. **5:** 7-74.
- [18] Church MA, Elliot AJ, Gable S. (2001). Perception of classroom cantext, achievement goals and achievement outcomes. *Journal of Educational Psychology.* **93:** 43-54.
- [19] Elliot AJ, Fonseca D, Moller AC. (2006). A social-cognitive model of achivement motivation and the 2 × 2 achivement goals framework. *Journal of Personality and Social Psychology.* 99: 666-679.
- [20] Gertrude Hennessey M. (1993). Student Ideas their conceptualization. ERIC Identifier: ED361209.
- [21] Hejazi A, Naghsh Z. (2008). The structural model of the relationship between perception of class, achievement goals, self-efficacy and self-regulation in math. New Cognitive Science. 10: 38-27.
- [22] Katula A, Rey S, Sherill C. (1999). Improving student motivation, parent communication and assessment while implementing a portfolio program. ERIC Document Reproduction serrice ED436309.
- [23] Klenowski V. (2002). Developing portfolios for learning and assessment. Landan: Routledg.
- [24] Scheraw G, Moshman D. (1995). Metacognition theorie. Educational Psychology Review. 7: 351-371.
- [25] Somervell H.(1993). Issue in assessment, enterprise and higher education: the case for self, peer and collaborative assessment. Assessment and Evaluation in Higher Education. 18: 221-233.