

GOAL ORIENTATION AND LEARNING STRATEGIES IN RELATION TO ACADEMIC ACHIEVEMENT OF ELEMENTARY SCHOOL STUDENTS

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The paper is a study conducted to explore gender difference in goal orientation and learning strategies among elementary school students in relation to academic achievement. Elliot and Church's (1997) Achievement Goal Questionnaire (AGQ) and Biggs' (2001) revised two-factor study process Questionnaire were used to measure achievement goal orientation and learning strategies among elementary school students. A representative sample of two hundred students (102 boys and 98 girls) was drawn on random basis while giving due weightage to gender. Data were analysed with the help of t-ratios. Results revealed that high achiever elementary school students are better than low achiever in their performance approach, mastery goal, deep strategy and deep motive, whereas low achiever elementary school students were better in performance avoidance, surface strategy and surface motive dimension of goal orientation and learning strategies. High achiever elementary school boys are better than high achiever elementary school girls in case of mastery goal, deep strategy but high achiever elementary school girls are better than their low achiever counterparts in case of surface strategy. Low achiever elementary school girls are better than low achiever elementary school boys in case of performance approach and surface motive dimension of goal orientation and learning strategies.

INTRODUCTION

Goal orientation has emerged as an important motivational construct in organisational research providing an explanation for the approaches, responses, and reasons that individuals use to engage in achievement activities (Ames, 1992). The definition of goal orientation is drawn from Dweck and Leggett's (1998) classification of two types of goals (learning goal and performance goal) that individuals pursue in task/learning contexts. Learning goals characterise individuals who seek to increase their competence, to understand or master something new, while performance goals characterize individuals who seek to gain favourable judgments of their competence or avoid negative evaluations of their competence. Thus, individuals with a learning goal orientation focus on the "development" of competence, while individuals with a performance goal orientation focus on the "judgment/evaluation" of their competence. The performance goal orientation has been split into two subtypes i.e. performance approach orientation and performance avoidance orientation (Middleton and Midgley, 1997). Individuals with a performance approach orientation want to be the best, to appear to be the most competent. As a result, they work hard and put in a lot of effort in order to surpass their peers. Whereas individuals with a performance avoidance orientation try to avoid making mistakes and appear incompetent. They take the known path, the unchallenging tasks, and are frequently reluctant to show their work to others until it is perfect. Orientation toward a goal is presumed to be a function of individual differences or to be included by situational constraints, as it influences the approach students take to learn and the strategies they use in learning. 'Approaches to learning' refers to the learners' different ways of relating to the learning task- 'how' and 'why' a learner learns'. The 'how' are the strategies devised by the learner to solve the problems defined by their motives (the why of learning). This combination of motive and strategy is called "an approach to learning". A deep motive by contrast is intrinsic, and meaning oriented. The deep strategy involves wide reading and an attempt to integrate new material into previous knowledge. The approach to learning resulting from this motive-strategy combination is the deep approach. A surface motive is an instrumental one in which the main purpose is to meet minimum requirements for assessment. Surface strategy is a reproductive one in which the focus is on recalling the essential element of content through rote learning. The superficial approach to learning resulting from this motive – strategy combination is termed as surface approach. There is a close relationship between motivation, the goal set by the students, the strategies students employ for learning. Franson (1997) reported that there is a link between deep approach to learning, and students' motivation and anxiety levels. Students who adopt a deep approach to learning tend to be intrinsically motivated; students adopting a surface approach show

extrinsic forms of motivation prompted by the fear of failure and the need to satisfy assessment requirements. Ames and Archer (1988) reported that a learning goal orientation is associated with more adaptive patterns of behaviour, cognition and affect than is a performance goal orientation. Tickle (2001) concluded that students who adopt deep learning strategies are motivated by mastery - oriented goals. Those who adopt surface level learning are motivated by pass only aspirations and hence, develop minimum effort learning strategies, often dictated by rote learning, only what is necessary. Chan and Lai (2002) found that students who scored higher on learning goal orientation were more likely to cognitively engage in deep strategy. Furthermore, students who scored higher on performance goal orientation were likely to engage in both surface and deep learning strategies. Some researchers have found that performance-approach goals are associated with higher grades (Church, Elliot, and Gable, 2001; Harackiewicz, Barron, Elliot, Carter, and Lehto, 1997; Harackiewicz, Barron, Tauer, Carter, and Elliot, 2000) and are not associated with the use superficial learning strategies (Archer, 1994; Pintrich and Garcia, 1991) and therefore should not be considered as maladaptive to student learning (Midgley, Kaplan, and Middleton, 2001). According to Vermunt (1996), instruction does not lead to learning automatically. The outcome of students' achievement in the course depends on the learning strategies they use. Various researches have investigated the relationship between these learning strategies and academic success. Byrne et al. (2001) revealed that the deep and strategic approaches are positively associated with high academic performance and the surface approach with poor academic performance. There was a significant positive relationship between the deep and strategic approach and the total assessment marks. Diseth (2003) reported that the deep learning approach was not a significant predictor of academic success. Several studies tried to identify goal orientation as a function of gender (Etnier et al. 2004; Brdar et al., 2006; Meece and Holt, 1993). Roeser, Midgley and Urda (1996) reported a tendency for males to be more performance oriented than females. Wentzel (1996) reported that learning and social goals are associated to a greater extent with the feminine gender, while achievement goals are more associated with the masculine gender. Middleton and Midgley (1997) reported that boys in the sixth grade are more likely to pursue performance-approach goals than girls. Markku (1997) also concluded that boys are more inclined to performance goals than girls. However, Ablard and Lipschultz (1998) showed a different result with males being less oriented toward learning goals than females but no differences on performance goals. Thornkildsen and Nicholls (1998) concluded that female students show more interest and affect attributions, while male students give more extrinsic explanations of performance-related events. Brdar et al. (2006) found that boys are more likely to adopt work-avoidance goals, while girls are more likely to pursue mastery goals. Roger et al. (2001) reported that boys have higher level of performance orientation than girls in English and Math. However, Meece and Holt (1993) and Niemivirta (1996) have concluded that performance orientation is equally frequent among male and female students. The research evidence is inconclusive with regard to goal orientation, learning strategies and achievement. Henceforth, it was decided to study goal orientation and learning strategies in relation to academic achievement of elementary school students of Punjab.

OBJECTIVES

*To study goal orientation and learning strategies among elementary school students in relation to academic achievement.

*To study gender difference in goal orientation and learning strategies among elementary school students in terms of high and low levels of academic achievement.

HYPOTHESES

*High achiever elementary school students will not differ significantly from their low achiever counterparts in their goal orientation and learning strategies.

*There will be no significant gender difference in goal orientation and learning strategies of elementary school students at high and low levels of academic achievement.

METHODOLOGY

The descriptive method of research was followed in the conduct of the present study.

Sample

The 8th grade elementary school students of Punjab were the universe of study. Since it was not feasible to cover all the elementary schools of Punjab for data collection, a representative sample of 200 students (102 boys and 98 girls) from elementary schools of Punjab was drawn on random basis while giving due weightage to gender.

Tools

Achievement Goal Questionnaire (AGQ) developed by Elliot and Church (1997) was used to measure three achievement goals: mastery, performance approach and performance avoidance. The AGQ consists of 18 questions, with 6 items used to compute a total score for each major achievement goal factor. Participants indicate their relative agreement with statements by using a 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Total scores for each achievement goal could theoretically range between 7 and 42. The reported reliability alphas for the measures of mastery, performance-approach and performance-avoidance achievement goals were .89, .91 and .77 respectively based on a study of a sample of 4 university undergraduates. Learning strategies were measured with the help of Revised Two-factor Study Process Questionnaire (R-SPQ-2F) developed by Biggs et al.(2001). This 20-item questionnaire consists of four components: deep motive, deep strategy, surface motive and surface strategy scales. Each scale contains five-items. Respondents used a 5-point Likert-type scale to rate each statement, ranging from 1 (not true of me) to 5 (almost true of me). Total scale scores could theoretically range between 5 and 25. Biggs' reported acceptable reliabilities for deep motive, deep strategy, surface motive and surface strategy were .62, .63, .72 and .57 respectively. Personal information data sheet was used by researcher to seek information regarding the academic achievement of the students in the subjects of science and mathematics.

RESULTS

The 't' ratios testing significance of mean differences between high and low achiever elementary school students on different goal orientations and learning strategies indicated that there were significant differences between high achiever elementary school students and low achiever elementary school students in relation to performance approach ($t=2.74;p<.01$), mastery goal ($t=4.23;p<.01$), deep strategy ($t=6.71;p<.01$), deep motive ($t=4.76;p<.01$), surface strategy ($t=3.18;p<.01$), surface motive ($t=3.59;p<.01$) dimensions of goal orientation and learning strategies respectively. There were no significant differences between high achiever elementary school students and low achiever elementary school students in relation to performance avoidance dimensions of goal orientation ($t=0.66;p>.05$). Hence, the hypothesis 'high achiever elementary school students will not differ significantly from their low achiever counterparts in their goal orientation and learning strategies' is rejected. The 't' ratios testing significance of gender difference in high achiever elementary school students on different goal orientations and learning strategies indicated that there were no significant differences between high achiever elementary school boys and girls in relation to performance approach ($t=0.52;p>.05$), performance avoidance ($t=0.22;p>.05$), deep motive ($t=1.61;p>.05$), surface motive ($t=0.54;p>.05$) dimensions of goal orientation and learning strategies respectively. There were significant differences between high achiever elementary school boys and girls in relation to mastery goal ($t=2.39;p<.05$), deep strategy ($t=2.30;p<.05$) and surface strategy ($t=2.08;p<.05$) dimensions of goal orientation and learning strategies respectively. Hence, the hypothesis 'there will be no significant gender difference in goal orientation and learning strategies' of elementary school students at high level of academic achievement' is partially accepted. The 't' ratios testing significance of gender difference in low achiever elementary school students on different goal orientations and learning strategies indicated that there were no significant differences between low achiever elementary school boys and girls in relation to mastery goal ($t=0.64;p>.05$), performance avoidance ($t=1.31;p>.05$), deep strategy ($t=0.54;p>.05$), deep motive

($t=0.14$; $p>.05$) and surface strategy ($t=0.02$; $p>.05$) dimensions of goal orientation and learning strategies respectively. There were significant differences between low achiever elementary school boys and girls in performance approach ($t=2.15$; $p<.05$) and surface motive ($t=3.82$; $p<.01$) dimensions of goal orientation and learning strategies. Hence, the hypothesis 'there will be no significant gender difference in goal orientation and learning strategies of elementary school students at low levels of academic achievement' is partially accepted.

CONCLUSION

The following conclusions were drawn on the basis of the analysis of data. High achiever elementary school students are significantly better than low achiever ones on performance approach, mastery goal, deep strategy and deep motive dimensions of goal orientation and learning strategies. On the other hand low achiever elementary school students are significantly better than high achievers on performance avoidance, surface strategy and surface motive dimensions of goal orientation and learning strategies. High achiever elementary school boys are significantly better than high achiever elementary school girls in case of mastery goal dimension of goal orientation. High achiever elementary school boys are significantly better than girls in case of deep strategy. But high achiever elementary school girls are better than their low achiever counterparts in case of surface strategy. Low achiever elementary school girls are significantly better than low achiever elementary school boys in case of performance approach. Low achiever elementary school girls are significantly better than low achiever elementary school boys in surface motive dimension of learning strategies. The present study indicates that elementary school boys are more inclined towards using deep strategy and deep motive pattern of studies than girls. Girls use surface strategy and surface motive pattern of studies. However, as deep strategy and deep motive are the preferred methods for better learning, this tendency needs to be developed among girls too. For this to happen, able guidance and appropriate motivation from the teachers are necessary, especially for girls. Low achievers have an increased tendency of performance avoidance. In order to become high achiever, the low achievers will have to reduce performance avoidance and develop the tendency for mastery goals and performance approach. Teachers should help to change the low achieving students' motivational belief pattern to performance approach and preferably to mastery goal. Elementary level low achiever students use surface strategy and surface motive pattern of learning strategies. The teachers need to change the learning strategy or the learning style of each student by minimising the usage of surface strategy and surface motive and developing inclination and interest towards deep strategy and deep motive. It has also been noted that if the mastery goals of the students' are better, the learning strategy is also better. If the performance approach is better then the learning strategy is automatically better. The performance avoidance reflects negative variations in the learning strategy. The teachers need to find out ways to reduce performance avoidance inclination amongst the students and motivate them to inculcate the habit for deep strategy and deep motive learning strategies.

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