

A Comparative Analysis of the Goal Orientation and Test Anxiety of High School Students With And Without Private Tutors

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The purpose of the study was to find out whether the goal orientation and test anxiety of high school students engaged in shadow education will be different from those whose only source of learning is that of mainstream education. A total of 387 high school students participated in this comparative research. They completed the Patterns of Adaptive Learning Scales and the Test Anxiety Inventory and results show that high school students without exposure to shadow education are more mastery-oriented while those with those with private tutors are more performance-oriented. In terms of test anxiety, it appears that those engaged in shadow education are more anxious about the testing process as compared to those without private tutors. Specifically, significant differences between the two groups were observed in their mastery orientation, level of emotionality and total test anxiety.

Keywords: shadow education, goal orientation, test anxiety

Completing secondary education has always been one of the top priorities of families in Asia because it is not only seen as a stepping stone towards university life, professional development and success but also as a “way out” of poverty and hardship experienced by those that belong to low income brackets. Part and parcel of this focus are concerns about personal academic performance and individual student ranking. This heightened level of competitiveness have contributed to the increase in the demand for supplementary education.

Supplementary education refers to additional “schooling” availed by students outside mainstream education and one type of supplementary education is known as shadow education or private tutoring. It is a phenomenon that is popular in basic education in the East (Lee, 1996; Rohlen, 1980; Zeng, 1999) and South Asia (de Silva, 1994; Hemachandra, 1982) because of the view that mainstream education does not adequately meet the educational needs and aspirations of families (Bray & Kobakhidze, 2014). This is partly due to a whole range of problems confronting

mainstream education in developing countries which includes shortage of classrooms, poor quality of instruction, shortage of qualified teachers and inadequate budget. It makes use of the term shadow because it only exists in the background of mainstream education (Bray, 2007). This means that the conduct and content of shadow education depends on what goes on in mainstream education; so as the mainstream education grows, the shadow grows with it (Bray & Lykins, 2012). Shadow education has two purpose: remedial and enhancement and among Asian families, the decision to engage in it is often familial in nature because parents who are worried about their children's future result to shadow education to further aid their learning, improve understanding of subjects taught in the mainstream system and attain the highest grades possible (Ireson, 2004). The two common forms of shadow education are one-on-one tutoring which involves a tutor/teacher and a tutee/student interacting face-to-face and conducted either in the home of the tutor or tutee or in a tutorial center while the other involve peers where tutoring is done either individually or in small groups (Ramos et al., 2012). Regardless of form, past researches were able to document the ability of shadow education to create an impact in the lives of students. Result shows that students who worked in groups or have been individually tutored learned and achieved more compared to those without tutors (Bray, 2014; Comfort & McMahan, 2014; Guerra-Martin, Lima-Serrano, & Lima-Rodriguez, 2017; Schacter, 2000; Su-Jung, 2013; Ullah, Tabassum, & Kaleem, 2018). Similar results were found among Vietnamese (Dang, 2007; Ha & Harpham, 2005), Indian (Banerjee, Cole, Duflo, & Linden, 2007), Japanese (Stenvenson & Baker, 2001) and Korean (Schacter, 2000) students. However not all effects were positive since shadow education was also found to be ineffective in improving

student performance (Briggs, 2001; Cheo & Quah, 2005; Jung & Lee, 2010). These contrasting results is attributed to the manner in which students participated in shadow education activities (Bae et al., 2010), the time frame or duration involved (George, Cusick, Wasserman, & Gladden, 2007; Lauer et al., 2006; Little, Wimer, & Weiss, 2008) and their innate abilities (Jenner & Jenner, 2007; Lauer et al., 2006; Loyalka & Zakharov, 2016; McComb & Scott-Little, 2003).

Aside from increase in test scores, after school programs like shadow education also had effects on promoting active engagement in other learning activities (Bae, Oh, Kim, Lee, & Oh, 2010). It is also known to impact the social, emotional and physical well-being of students (Bae et al., 2010; Ramos et al., 2012), their attitude towards school (Grossman et al., 2002; Vandell et al., 2006), self-confidence (Tarekegne & Kebede, 2017), self-esteem, self-management and social skills (Karcher, 2005). Given all these and considering the nature and purpose of shadow education, it is now our view that most of the time high school students with private tutors have an advantage over those without tutors in both academic and non-academic areas of their education. This happens because of the supplementary assistance and guidance they receive from their tutors, something that is absent among high school students that rely only on mainstream education. This makes availing of shadow education or private tutoring more desirable.

Among the many educational variables present in high school students, we believe that those with and without tutors will be different in terms of their goal orientation and test anxiety. Goal orientation, originally developed in the educational literature to help explain individual differences in students' learning (Dweck & Leggett, 1988). It is based on the contemporary goal-as-motives theory where it is posited that all actions are

given meaning, direction, and purpose by the goals that individuals seek out, and that the quality and intensity of behavior will change as these goals change (Covington, 2000). In general, goals are defined as the end toward which effort is directed while goal orientation pertains to the integrated pattern of beliefs that results in different ways of approaching, engaging, and responding to achievement situations (Ames, 1992). Goal orientation theory, also called achievement goal theory (AGT), states that students have distinctive orientations towards certain type of goals (Was, 2006). Researchers initially distinguished two broad goal orientations toward learning: mastery and performance. The primary difference between these two types of goal orientation is whether learning is valued as an end in itself or as a means to reach some external goal (Meece, Blumenfeld, & Hoyle, 1998).

Students who are geared towards developing competence holds a mastery goal orientation where the focus is on learning, understanding, developing skills, and mastering information. It is often associated with adaptive patterns of achievement such as holding positive attitudes in relation to self and task (Turner & Patrick, 2004), high levels of self-efficacy and interest (Middleton & Midgley, 1997) and determination to continue despite the difficulty of tasks. In particular, these students focus on the task at hand and prefer situations where they can develop new skills and knowledge (Nicholls, 1989). On the other hand, demonstrating competence is the focus of those who holds performance goal orientation. Here, students are concerned with managing the impression that others have on their ability, attempts to create an impression of high ability and at the same time avoiding the impression of low ability (Dweck, 1986). It is of two types: performance approach and performance avoidance (Middleton & Midgley, 1997), the distinction between the two

fundamentally lies on whether students want to look competent at their schoolwork (Harackiewicz, Barron, & Elliot, 1998) or avoid unfavorable judgment of one's competence (VandeWalle, 1997; VandeWalle, Cron, & Slocum, 2001). Another distinction is that performance-approach students are motivated to perform better than their peers in contrast to performance-avoidance students whose motivation is to avoid performing poorly relative to others (Howell & Watson, 2007). In relation to the present work, though all types of goal orientation are present in all students, their degree of endorsement is expected to vary. We believe that those whose source of learning comes from mainstream education alone are expected to be more mastery oriented compared to those with tutors because the focus of mastery orientation is reflective of the objectives and philosophy of mainstream education and educational institutions. Those with tutors however, are expected to be more performance oriented because their focus during the entire learning process is demonstrating their competence as this is has become the sole criteria in deciding whether shadow education or private tutoring should be terminated or continued.

Test anxiety is another variable where high school students with or without tutors may be different. This is an important construct because the process of testing is an integral part of the education, learning process and academic life of students but is often met with different reactions and emotions, the most common of which is test anxiety (Cayubit, 2014; Ergene, 2011). This type of apprehension stems from feelings of concerns that their performance are being carefully watched or evaluated (Cheraghian, Fereidooni Moghadam, Bar az-Pardjani, & Bavarsad, 2008). Test anxiety is also described as a psychological state of mind (Olatoye & Afuwape, 2003) that elicits cognitive and

behavioral responses among students. The testing process stimulates negative feelings that manifests through tension, worry, fear, uncertainty, concern and helplessness experienced before, during or after a test (Bagana, Raciub, & Lupuc, 2011; Olatoye, 2009).

Test anxiety has two components: worry and emotionality (Spielberger, 1980). These two components contrast in their manifestation, temporal pattern and impact on academic functioning of students. The worry component is long-lasting, prolonged and is consistently seen as debilitating to the performance and academic achievement of students (Cassady & Johnson, 2002) because of debilitating cognitions, such as negative self-evaluations and off-task thoughts. In contrast, emotionality is short-lived and is made up of feelings and reactions as a consequence of being part of the testing process (Spielberger, 1980). Students who are test-anxious are inclined to respond to tests with worry, tension, and negative thoughts during each testing situation. They may also experience intense emotions and physiological hyper-arousal (Sena, Lowe, & Lee, 2007) to the extent that physical symptoms, like sweating excessively and breathing rapidly, become evident as they prepare or take tests. Other signs of test anxiety would include fear of failing (Meijer, 2001; Putwain, Woods, & Symes, 2010), fear of negative evaluation from others (Lowe et al. 2008) and feelings of uneasiness, uncertainty and apprehension (Donaldson, Gooler, & Scriven, 2002). In light of all these, we believe that though all types of students experience test anxiety those without private tutors tend to experience it more. It is our opinion that the presence of private tutors may serve as a buffer to counter the effects and experience of test anxiety because high school students with private tutors know that they received extra help in their test preparation.

Hence, this study aims to investigate the difference between high school students engaged in shadow education and high school students without private tutors in terms of their goal orientations and their experience of test anxiety. This is in response to what we perceive as a dearth of literature comparing the two groups of high school students. Findings of this comparative inquiry does not only contribute to existing literature on shadow education, goal orientation and test anxiety but also provide empirical evidence and valuable insights on the advantages and disadvantages of having and not having private tutors.

Method

Design

In comparing the participants' goal orientation and test anxiety, the descriptive cross-sectional non-experimental design was utilized. This is deemed to be the most appropriate design to use in order to attain the objectives of the study. This design involves documenting, describing and comparing the goal orientation and test anxiety of high school students drawn from two separate and distinguishable sub-groups: shadow education group and non-shadow education group (Coolican, 2014; Johnson, 2001).

Participants

This study used an opportunity sample of 387 high school students from different tutorial centers and schools in the National Capital Region of the Philippines. The sample was divided into two groups, the shadow education (SE) group (N=167) and the non-shadow education (NSE) group (N=220). The SE group has 94 females (56.29%) and 73 males (43.71%), majority of whom have been availing of private tutoring for a least 6 months. The NSE group are students enrolled in a regular

high school, 167 (75.91%) are females and 53 or 24.09% are males. Age range for the two groups is 12 to 17 years.

Instruments

Patterns of Adaptive Learning Scales (PALS).

This 94-item scale (student form) developed by Migdley et al. (1998) was used to determine where the participants holds mastery, performance approach and performance avoidance achievement goals. It makes use of a 5 point Likert type of scale and takes around 30 to 40 minutes to complete. It is psychometrically sound with concurrent, construct and discriminant validity and Cronbach alphas ranging from .74 to .89 for all its subscales (Migdley et al., 1998; Migdley et al., 2000).

Test Anxiety Inventory.

It is a self-reporting psychometric scale that was developed to measure individual differences in test anxiety as a situation-specific personality trait (Spielberger, 1972; Spielberger et al., 1978). In addition to measuring individual differences in anxiety proneness in test situations, the TAI subscales assess worry and emotionality as major components of test anxiety. It makes use of a four-point scale to report how frequently one experience specific symptoms of anxiety in test situations. The four choices are: (1) almost never, (2) sometimes, (3) often, and (4) almost always. TAI is a reliable and valid psychometric measure. The alphas for the TAI Total scale were uniformly high for both males and females (.92 or higher). The TAI Scales provide operational measures of test anxiety, worry, and emotionality. TAI was correlated with six other anxiety measures, beginning with correlations of the TAI with Sarason's (1978) *Test Anxiety Scale* (TAS) and *Worry and Emotionality Questionnaire* (WEQ) for male and female

undergraduates. The correlations of the TAI Total scale with the TAS, .82 for males and .83 for females, are comparable to the reliability coefficients for each scale and suggest that the 20-item TAI Total scale and the 37-item TAS are essentially equivalent measures.

Data Analysis

Data from all the measures were processed using the IBM Statistical Packages for Social Science version 20. Descriptive statistics particularly the mean and standard deviation were computed to determine the current goal orientation and test anxiety of the participants. While the t Test for Independent Samples and Cohen's D were employed to assess the significant difference between the shadow education and non-shadow education group with respect to the research variables.

Results

Table 1, found on the next page, lists the mean and standard deviations of the goal orientation and test anxiety of the participants when grouped into shadow education and non-shadow education group. Result show that high school students with private tutors have low mastery goal compared to those without private tutors (high mastery goal). On the other hand, both groups are average when it comes their performance goals. Concerning their test anxiety, those with private tutors had high scores in emotionality, worry and the experience of total anxiety compared to those without tutors.

When the two groups were compared, significant statistical difference with medium effect was observed in their mastery goals ($t(385) = 3.246, p = .001$), emotionality ($t(385) = 2.905, p = .004$), and total test anxiety ($t(385) = 2.467, p = .014$) while no significant difference exists

in their performance goals and worry component of test anxiety.

Table 1

Difference in the goal orientation and test anxiety of the participants

	SE M (SD)	NSE M (SD)	t value	df	p value	d
Mastery	20.60 (3.89)	21.81 (3.30)	3.246	385	0.001*	0.335**
Performance Approach	14.49 (4.40)	14.20 (4.58)	0.607	385	0.544	0.064
Performance Avoid	12.25 (2.81)	12.06 (3.15)	0.623	385	0.534	0.063
Emotionality	18.89 (4.86)	17.52 (4.38)	2.905	385	0.004*	0.296**
Worry	18.42 (4.48)	17.99 (4.24)	1.856	385	0.064	0.098
Total Test Anxiety	46.69 (10.57)	44.16 (9.53)	2.467	385	0.014*	0.251**

*Note: * significant at 0.05; N= 387; SE = Shadow Education group (N=167); NSE = Non-shadow education group (N=220); ** = medium effect for Cohen's d*

Discussion

As is true in any comparative research, one cannot outright claim causality and effect based on the significant differences found in the data. Despite this inherent limitation notwithstanding, the present result nonetheless suggests some potential causes to help explain why students with and without private tutors differ in their goal orientation and test anxiety. In particular, findings of this study confirm the view that those high school students without private tutors are more mastery goal oriented.

Their holding of the mastery goal orientation may have been influenced by the nature and purpose of mainstream education that is reflected in how their classes are oriented, handled and taught. In general, mainstream education is supposed to facilitate and ensure the learning and growth of students through self-improvement, acquiring knowledge and development of life long skills, transmitted to students from their teachers. These objectives are synonymous to what mastery goal orientation is all about.

Mastery goal orientation deals with developing competence, personal growth, increasing adaptive learning and mastering the environment (Basit & Rahman, 2017; Peer, 2007). The result of which are students who define success as mastering the task, learning new skills and knowledge, and progress over past performances (Ames, 1992) focusing on self-improvement and self-actualization (Kaplan & Flum, 2010). This means that high school students (without tutors) whose only source of learning is mainstream education may begin to imbibe and adopt its rationale and objectives as similar to his resulting to higher levels of mastery orientation. This theorizing is grounded on views that goal orientation maybe considered both as a trait and a state (DeShon & Gillespie, 2005) where personal dispositions can be influenced by situational and contextual characteristics (Button, Mathieu, & Zajac, 1996). These situational and contextual characteristics provides situational and contextual cues that influences high school students to adopt a particular goal orientation (Button et al., 1996). These cues would include teachers' positive approach to learning and

teaching, praising students' efforts, modelling to students how to plan, monitor and evaluate their learning, encouraging class participation, emphasizing that making a mistake is part of the learning process, giving affirmation and appreciating students' effort, and emphasizing the advantage of doing challenging tasks among others (Shumow & Schmidt, 2014).

This however does not mean that mastery orientation does not exist in students with private tutors. On the contrary, their predominant orientation could have been mastery at the beginning since they are also part of mainstream education but because of their engagement in shadow education (changing of their situational and contextual characteristics) they begin to adopt a more performance oriented approach to learning. This is evident from their higher mean scores compared to that of the non-shadow education group. Though the statistical analysis performed did not reveal significant differences in their performance goal orientations, the result nonetheless is worth examining as it will provide valuable insights on why those with tutors lean towards both types of performance goals.

We believe the change in goals happen because the main focus has shifted from learning for the sake of learning to learning in order to demonstrate competence since performance and grades are often the sole criteria in deciding whether there is a need for shadow education. Thus high school students with tutors tend to perceive that achieving higher grades is their main reason for learning and at the same time the supplementary assistance and intensive guidance provided by tutors may effectively reduce the sense of challenge and effort exerted in the tasks assigned to the students (Ramos et al., 2012) resulting to a change in their goal orientation. Students with tutors appear to be more

concerned about how others perceive their ability, the high need to demonstrate those abilities, competing with others and exerting extra effort to ensure there weakness are not known, all of which are characteristics of individuals who subscribe to both performance approach and avoidance goals. We believe this happens because at present times, the focus of shadow education may no longer be remedial or helping students but much more about competition and creation of differentials because of the belief that extra lessons are essential for academic success (Bray & Lykins, 2012).

Looking at their test anxiety, significant differences were found in emotionality and overall test anxiety while no significant difference exist in its worry component. Based on their mean scores however, it appears that high school students with tutors are more prone to experience test anxiety. Test anxiety is a negative state and trait experienced by all types of students since it is an inherent component of the testing process. It is something unavoidable since mainstream education relies heavily on tests to assess the performance of students. Its effect and manifestation vary in degree depending on the nature and purpose of tests but this can be managed to a minimum level so that its effect no longer influences the outcome (Cayubit, 2014). This can only happen however if students are equipped with the things needed to successfully hurdle the testing process.

This was the basis of our initial conceptualization since we saw private tutoring or shadow education as a way to equip students with the things they need for testing and school. We expected that those engaged in shadow education would experience less test anxiety because of the added help and guidance they receive from their tutors. Their engagement in shadow education may serve as a buffer to counter the stress and pressure related to taking

tests. Interestingly though, this was not the case with the present study since those with tutors appear to be more anxious compared to those without tutors. It seems that shadow education may be counterproductive because the more extensive the learning the higher the expectation to perform. These high expectations and the thought of possible failure can increase the level of worry. In addition, anxious feelings about taking tests maybe brought about not by the lack of effective cognitive and test taking strategies but because of the subjective evaluation of their readiness and ability to take tests. This means that test anxiety may be high among high school students who believe that they will not be able to do well because during the actual test, their tutors are no longer present to assist them. Finally, the realization that the whole testing process includes aspects that are not within the control of students can contribute to the experience of stress, hence, emotionality is high. With these experiences, there is greater likelihood for these students, despite having tutors, to experience test anxiety.

Conclusion

We have briefly examined how high school students engaged in shadow education differ from high school students whose source of learning is that of mainstream education alone. The present work contributed to the literature on shadow education by presenting a clear picture of the goal orientations subscribed by those with private tutors and their experience of test anxiety. At the same time, this study was also able to present initial evidence to show that not everything related to shadow education would be advantageous to students. This study however, has a certain limitation, given its study site, the findings may not mirror the experiences of all high school students with or without private tutors.

Nonetheless, we believe that our findings are substantial and is worthy of further investigation.

Acknowledgment

We are grateful for the support of the different high schools, tutorial centers and the Research Center for Social Sciences and Education of the University of Santo Tomas, Manila, Philippines.

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