Abstract

Test anxiety has become a problem in education. Its impact can be detrimental; it can even threat students to fail in academic area. Goal orientation is the purpose of individual to engage in activities and achievement. In the classroom teacher has goal to create learning activities so that students get the expected achievement, this is called teachers’ goal orientation which will be perceived by students and later influence student personal goal orientation. This research is aimed to see the contribution of student’s perception toward teacher goal orientation and student’s goal orientation as a mediator in test anxiety on elementary student’s final exams. Subject were 190 students of 6th grade elementary level at south district of Jakarta Indonesia. The result shows that the performance goal orientation is positively and directly and indirectly related through student’s goal orientation that serves as a mediator with test anxiety. Whereas, student’s perception about mastery goal orientation and work avoidance are negatively related, directly or indirectly, through student goal orientation with test anxiety. The result suggested applying mastery teacher’s goal orientation in the classroom so that student can adopt goal orientation and it will expect to reduce test anxiety.

1. Main text

Test Anxiety is a specific form of anxiety because test anxiety specifically refers to the conditions experienced by the individual before, at the time and after the test. Test anxiety can be described as a form of individual response to evaluative situations that affect the student to worry too much about possibility of failure which raises anxiety on him. The term "test" is not limited to examinations, tests or exams only, but it is widely used also. Research on test anxiety is usually applied in all situations where the intellectual abilities of students are evaluated, the situation starts – from formal tests to simple things like daily question given by teacher (Stipek, 2002). The term “test anxiety” as the scientific definition, is a phenomenological and physiological response and behaviour which accompanies the attention for negative consequence such as being failed on the test or other similar evaluative situations (Zeidner, 1998).

The impact of test anxiety can be detrimental for student’s achievement. Students who experience test anxiety are threatened to be failed in academics area. Spielberger (1966) reported that 20% of students who have high test anxiety characteristics should drop out of school due to academic failure. This is because students who have high test anxiety will have behavioural deficit characteristics on academic ability. In addition to students who cognitively have a high test anxiety is said to have difficulty in encoding information, organizing the information into
meaningful patterns, and they will have difficulty in the use of the metacognitive process effectively such as self-monitoring (Benjamin, McKeachie, Lin, & Holinger, 1981). The prevalence of anxiety tests also showed great number. A cross-cultural research reveals the prevalence of anxiety tests occurred in 15% (Hill & Wigfield, 1984) and 20% of students (McDonald, 2001). In term of Indonesian classroom, if in an average class contained 30 students about 4-6 students are experiencing test anxiety. Although these figures seem small, however if there are 26,984,824 elementary school students throughout Indonesia in 2008/2009 (http://www.kemdiknas.go.id/) that is to be around 4,047,724 students will experience test anxiety in Indonesia.

At school, the teachers and students are doing teaching and learning activities that lead to a particular goal. It means that teachers and students have a purpose in doing the activity of teaching and learning, and their behaviour here reflects the orientation of their goals. It is recognized by Dweck (in Church, Elliot & Gable, 2001) that the goal orientation theory can be used to understand the behaviour in the world of education. Meeca, Blumenfeld & Hold (1988) explains that the purpose of the individual doing the activity of learning and achievement is called goal orientation. Goal orientation adopted by someone in competitive situation will affect the mind, affection and person's behaviour (Jagacinski & Duda, 2001). The goal orientation of student in learning is the purpose that based the students to do the activity of learning and achievement. Whereas the purpose that based the teacher in creating teaching and learning activities so their students can obtain the expected accomplishment is described as teachers' goal orientation (Butler, 2007).

In relation to the test anxiety, the relationship between goal orientation and test anxiety is seen from the affective aspect of those goal orientations. It is said that individuals with the mastery goal orientation have a low-anxiety because they do not fear to make mistakes in learning. They have no doubt to choose tasks that can cause error. If this task is offering the opportunity to increase the skill, for individuals with the performance goal orientation tend to have high anxiety because they fear to do mistakes. They will avoid the task containing risk of error (Schunk, Pintrich & Meece, 2010). Meanwhile individuals with the work avoidance goal orientation tend to have low anxiety because they don't care about the performance and results of the studies (Dowson and McInerney 2001; Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000).

A connection between the perceptions of students about goal orientation of teacher and goal orientation of the students (Roeser, Strobel, Quihuis, 2002; Anderman & Midgley, 1997), and between the goal orientation of student and the test anxiety (Schunk, Pintrich, Meece, 2010; Elliot and Harackiewicz, 1994; Elliot & McGregor, 1999,Ormrod, 2010; Woolfolk & Murphy, 2001; Dowson & McInerney, 2001) underlying the research. Based on the relationship of mediators from Barron and Kenny (1986) it is explained that mediator variable is a variable that bridges the connection between independent variable and dependent variable, then it can be concluded that the student goal orientation is the mediator between the perceptions of students about teacher goal orientation and the test anxiety. Referring to previous research has explored the relationships of the teachers’ goal orientation as the direct or indirect circumstantial factors through the students ‘ goal orientation as personal factors with test anxiety.

2. Theoretical Exploration
2.1. Test Anxiety
The term test anxiety as a conceptual definition leads to a phenomenological, physiological response and behaviour which accompanies the attention to have a possibility of negative consequences such as a feeling to be failed on the test or other similar evaluative situation (Zeidner, 1998). Further explained about phenomenological response here, it means that the student with high test anxiety is identified to have a low threshold to anxiety; means when he faced the evaluative situation in general he always considers the situation as a threat to him. The impact of this perception leads to low self-efficacy, the picture in mind about failure, and very strong emotional reactions (Sarason, 1987; Sarason & Sarason 1990). While the physiological response leads to some reaction to the body such as heart contraction, increasing the pulse rate, blood pressure, body temperature, blood sugar, stomach acid, enlargement of the pupil of the eyes, difficult breathing, muscle tension and sweating (Hollandsworth, Glazeski, Kirkland, Jones, & Van Norman, 1979; Holroyd, Westbrook, Wolf, & Badhorn, 1978). Further behavioural response particularly arises when someone trusts that the intellectual ability, social and motivation are blocked by the presence of tests, so there are emerging behaviour such as procrastination (Rothblum, Solomon, Murakami, 1986), self-handicapping (Harris, Snyder, Higgins, & Schrag, 1986) or even the perfectionist overstiver (Blatt, 1995 & Covington, 1992). Some student’s behaviour that appears as the result of the anxiety test is called behavioural deficit on general academic ability, such as being unable to use/maximize the time in class, organize and take notes in class, do the preparation for tests, integrate the lessons that have been learned, and maximize the use of time in doing the test (Culler & Holahan, 1980; Kirkland & Holansworth, 1979, 1980).
Some researchers have also provided a number of conceptual definitions of test anxiety. It is mentioned that the test anxiety is the anxiety that comes up in the evaluative situation (Sarason, 1978; Zeidner, 1998), the fear of failure (Meijer, J. & Oostdam, 2007), the threat to the ego and self-esteem (Spielberger, 1966), and the concern on the performance (Hong, 1999).

2.2. Student’s Goal Orientation

Meeca, Blumenfeld & Hold (1988) explains that the purposes that underlie the individual in doing the activity of learning and achievement are called goal orientation. Ames (1999) stated that the purpose of the orientation represents the integrated belief patterns that lead someone to various and different ways in doing the approach, self involving, and giving in the achieved situation successfully. In this research student’s goal orientation is specific situational orientation adopted by the students in classroom that will affect cognition, affection and student behaviour in achieving the target.

There are several types of goal orientation, but there are two types of main orientation objectives which in this research are known as mastery goal orientation and performance goal orientation. Mastery goal orientation focused on learning and mastering the new tasks, whereas student’s mastery goal orientation of is the orientation purposes that lead to the mastery of new tasks, and ability increasing, competence and understanding of the tasks, and the most important is the effort to improve self and learning, no matter how many mistakes have been made and they are not afraid to be considered deviant behaviour by others (Woolfolk, 2004; Meece & Holt, 1993). Performance goal orientation focused on efforts to obtain recognition from other people that he/she is capable of and always attempt to avoid negative evaluation from others. Student’s performance goal orientation is the orientation objectives that focus on the inner capabilities and how these skills are evaluated by others (Meece & Holt, 1993; Midgley & Middleton, 2001). Recent research has found that there are students who are completely trying to avoid assignments in class, or showing very minimal effort in doing their duties (Dowson & McInerney 2001). These students are said to have the orientation purpose of avoidance task (work-avoidance). The student’s work-avoidance goal orientation is the objective that focuses on the desire to avoid academic assignments and tasks with minimal effort (Nichols, 1984, Meece & Holt, 1993; Harackiewicz, Baron, Carter, Letho, & Elliot, 1997).

2.3. Teacher’s Goal Orientation

A variety of research and theory in the achievement motivation have been explained how important the factors on personality and environment are in predicting affection, cognition, and the behaviour with the background of well-achievers (Lewin, Dembo, Festinger, & Sears, 1994). Initially the goal orientation theory only focuses on the reason the students doing the learning is to obtain achievement only, but then as the time progresses, goal orientation is not just limited to the students but also to the teacher. Butler (2007) explained that in the practice of teaching and learning, the theory of accomplished goal can be applied to the concept of motivation not only on learning but also teaching. The purpose underlies the teacher in creating teaching and learning activities so that his students can obtain the expected accomplishment is called teachers’ goal orientation.

Mastery teachers’ goal orientation related to the tendency to relatively evaluate the needs of the task or the previous results, connect the results with effort, choose tasks that are challenging, outline the difficulties as a diagnosis on the need for further learning, and respond to the difficulty by finding the assistance and information that can support the learning (Butler, 2007).

Performance teachers’ goal orientation leads to orientate students to define and evaluate the competence of relative students with other students, associating results with ability, outlines the difficulties in diagnosis of low ability, resist the urge to ask for help because he would seem to have less knowledge (Butler, 2007). Additionally Ames (1992) stressed on the teacher orientation of performance teachers’ goal leads to standard performance compared with other students, emphasizes that on the value rather than efforts and the learning process, as well as demonstrating the ability of students compared to others. Work avoidance teachers leads is characterized with a feeling of success of the teachers when they don’t need to work hard and find some of their classes are cancelled, they tend to minimize teaching because their teaching purpose is merely fulfilling the teaching obligation (Butler, 2007). They will give easy assignments and assignment without much effort from the students, teachers who have
work-avoidance as their goal orientation will likely do minimal effort so there will be permissive classes and minimal task classes created.

3. Research Methods
3.1. Participants
Participants in this study were 190 students of 6th grade of elementary school that will face the National Final Exam. Participants were in the region of South of Jakarta-Indonesia

3.2. Design and Measuring Tools
Research Design is the field study because the purpose of the research was to examine the influence of one or more independent variables to the dependent variables. The independent variables in this study are the perception of student on teachers’ goal orientation and students’ goal orientation, whereas the dependent variable is test anxiety.

Instrument used in measuring the test anxiety is Test Anxiety Inventory (TAI) (Spielberger, 1980). The gauge is measuring in two main components namely worry and emotionality. To measure the students’ goal orientation mastery and performance as well as the perceptions of students on the teachers’ goal orientation mastery and performance, the gauge used is the Pattern of Adaptive Learning Survey (PALS) (Midgley et al, 2000). Instruments used to measure subscale of the students’ goal orientation work avoidance’ and the perceptions of students on teachers’ goal orientation work avoidance’, is adapted and modified from other various sources such as researches from Seifert and O'Keefe (2001), Butler (2007), Dowson and McInerney (2001).

4. Result and discussion
4.1. Result

![Figure 1](image)

Mas TO = Students’ perception on Mastery Teachers’ Goal Orientation; Perf TO = Students’ perception on Performance Teachers’ Goal Orientation; WorATO = Students’ perception on Work Avoidance Teachers’ Goal Orientation; Mas SO = Mastery Students’ Goal Orientation; Perf SO = Performance Students’ Goal Orientation; WorA SO = Work Avoidance Students Goal Orientation; Worry = Worry; Emoti = Emotionality

Figure 1
4.2. Discussion

With a few exceptions, i.e., direct contributions between the perceptions of students on the teacher orientation of teaching goal ‘Mastery’, ‘Performance’ and ‘Work Avoidance’ toward worry, the result is not significant, the hypothesized relationship between perceptions of students on teacher orientation of teaching goal and the student orientation of learning objectives ‘Mastery’, ‘Performance’ and ‘Work Avoidance’ toward test anxiety adequately supports several previous research (Bandalos, Finney, & Geske, 2003, Elliot & McGregor, 1999). The following steps will be discussing about the results of the hypothesis:

4.2.1. The contribution of the perceptions of students on teachers’ goal orientation toward Test Anxiety

Contribution of the perception of students on the teachers’ goal orientation ‘Mastery’ through mediation of students’ goal orientation ‘Mastery’ toward component of worry, the contribution component retrieved significantly negative ($\beta = -0.179; p < 0.05$). That means the higher the student perceives the teacher orientation of teaching goal ‘Mastery’ through the mediation of personal goal orientation ‘Mastery’, then the lower the worry he has. It supports the research of Bandalos et. al., (2003) who found negative contribution from the mastery orientation toward worry. Student will adopt the teachers’ goal orientation ‘Mastery’ to become his personal goal orientation, mastery goal orientation that focuses on mastery of lessons and personal competences that will reduce such negative thoughts such as being failed in facing the tests or exams. Students will feel ready to face tests because students feel they have mastered the subjects tested. This will increase the student’s performance when they are working on the test, because their cognition is not blocked by the negative thought (Stipek, 2002).

Student perceptions about the teachers’ goal orientation ‘Performance’ through mediation of students’ goal orientation ‘Performance’ against the components of worry, the contributions significantly acquired positive ($\beta = 0.22; p < 0.05$). That means the higher the student perceives the teacher orientation of teaching goals ‘Performance’ through the mediation of personal goal orientation ‘Performance’, then the higher the worry is. It also supports the research by Elliot & McGregor (1999) and Bandalos, Finney, & Geske (2003). This means that the teachers, goal orientation ‘Performance’ that focuses on social values and shows a comparison between the student ability and other students. This will be identified and adopted by student to become his personal goal orientation, so students more focused on showing capabilities, judgment from others and comparing their ability with other students. This will increase the negative thoughts during the tests. Students who focus more on value rather than the learning process will feel anxious toward the possibility of getting bad scores and receiving negative assessment from their friends.

Student perceptions of teachers’ goal orientation ‘Work Avoidance’ through mediation of students’ goal orientation ‘Work Avoidance’ toward component of worry, the contribution component retrieved significantly negative ($\beta = -0.156; p < 0.05$). That means the higher the student perceives the teacher orientation of teaching goal of ‘Work Avoidance’ through the mediation of personal orientation purposes ‘Work avoidance’ then the lower the worry is. That means the teachers’ goal orientation ‘Work Avoidance’ that focus on avoiding duties and doing minimum effort in teaching the students so they will adopt it to become their personal goal orientation. Besides students tend to avoid assignments given by the teachers, work to a minimum and limit the involvement of cognitive when studying. Indeed this objective orientation makes students less worry because students do not care about the results of their learning, then students do the test without having negative thoughts toward the test results so they do not feel anxious, however this goal orientation will lead to a poor academic achievement.

Student perceptions about the teachers’ goal orientation ‘Mastery’ through mediation of students’ goal orientation ‘Mastery’ toward component of emotionality, the contributions obtained significantly negative ($\beta = -0.258; p < 0.05$). That means the higher the student perceives the orientation of teacher orientation of teaching goal ‘Mastery’ through the mediation of personal goal orientation of ‘Mastery’, then the lower the emotionality is. Affective component of test anxiety is contributing with physiological reaction when students are in an evaluative situation. Based on the research results, it can be said that the teachers that focuses on mastery of tasks and student competencies will form an atmosphere of class that focuses on it so that the students are adopting it to become their personal goal orientation. The students eventually have an orientation purpose to master the material/lessons, like to
learn and not being afraid of making mistakes. This will cause the student to have a low level of anxiety in the affective component. It supports the research by Elliot & McGregor (1999) and Bandalos et al., (2003). Pekrun, Elliot, & Maier (2009) also finds negative contribution between objective orientation mastery and anxiety.

Student perceptions about the teachers’ goal orientation ‘Performance’ through mediation of students’ goal orientation ‘Performance’ toward components of emotionality, contributions acquired is significantly positive ($\beta = 0.484; p < 0.05$). That means the higher the student perceives the teacher orientation of teaching goal ‘Performance’ through the mediation of personal goal orientation performance, then the higher the emotionality is. This means that the teachers’ goal orientation ‘Performance’ that focuses on values, social comparison, student ability that are compared to other students will lead the students to identify and adopt the goal to become their personal goal orientation., making students more focused on demonstrating their capabilities, appraisal and judgment from others, and compare their ability with other students. This will increase anxiety test on affective components. Students will tend to feel nervous, restless, body shaking and others reactions associated with a state of physiologic when students are doing tests. Their performance will be judged to appear various unpleasant reactions. These feelings may ultimately hamper the performance of the students during test or exam (Hagtvet, 1985).

Student perceptions of teachers’ goal orientation ‘Work Avoidance’ through mediation students’ goal orientation ‘Work Avoidance’ toward component of emotionality, contributing obtained is significantly negative ($\beta = -0.242; p < 0.05$). That means the higher the student perceives the teacher orientation of teaching goal of ‘Work Avoidance’ through the mediation of personal orientation purposes, then the lower the emotionality is. Affective aspects of anxiety in emotionality is influenced by the orientation of the purpose of work avoidance, however this was not for lack of anxiety was able to resolve it yet more students on indifference on the results of learning.

4.2.2. The contribution of the perceptions’ of students on the teachers’ goal orientation directly toward test anxiety

In this research relation to perceptions of students on the teacher orientation of teaching goal, goal orientation, good performance and mastery work avoidance does not significantly contribute directly towards a cognitive component test anxiety worry. Results of this study do not support the results of the previous research by Putwain et. al.(2010). This is possible because the items that are valid in the research was only 3 items of questions, so that the measurement of this component of the respondents do not obtain results in accordance with predicted.

While perceptions of students on the teachers goal orientation ‘Mastery’ contributes directly to the affective component of emotionality, contributions acquired significantly positive nature ($\beta = 0.099; p < 0.05$). That is, the higher the student perceives his teacher's teaching goal mastery orientation then his emotionality is getting lower. So although the teachers’ goal orientation mastery is not adopted by students to become his personal goal orientation, but teachers that focus on mastery of the material and emphasis to the learning process will reduce feeling nervous, tense, shaking and other feelings that usually accompanies the student in the face of tests.

Student perceptions about the teachers’ goal orientation ‘Performance’ contributes directly to the affective component of emotionality, contributions acquired significantly has a positive result ($\beta = 0.428; p < 0.05$). That is, the higher the student perceives his teachers’ goal orientation mastery then his emotionality is getting lower. In this case it means students will experience the physiological responses of anxiety in the form of components i.e. feeling nervous, emotionality tense and body shaking when he perceives the teachers’ goal orientation that focuses on grades, the comparison of the scores of their students among the others, and engaged social comparison among students.

While perceptions of students on teachers’ goal orientation ‘Work Avoidance’ contributes directly to affective components of emotionality, contributions acquired is significantly negative ($\beta = -0.410; p < 0.05$). That is, the higher the student perceives his teachers’ goal orientation ‘Work Avoidance’ then the lower the emotionality is. So that although students did not adopt the teachers’ goal orientation that focuses on minimum efforts and avoid the task of teaching, students do not have anxiety response such as nervous, tense and body shaking, however this is because students do not care about the results of his studies and consider their teacher is quite permissive even if they get bad grades.

Research results obtained generally seem to support the research by Putwain et. al. (2010). It is found that the circumstantial factors which one of them is the teachers’ goal orientation can affect personal factors i.e. the students’ goal orientation in raising and lowering the test anxiety. It can be said, that the role of situational factors i.e. the teachers’ goal orientation affects the personal goal orientation of students learning against test anxiety directly or through the mediation of personal factors.
In this research, it can be concluded that handling anxiety test can not only focus on the student as a person but also regarding the environment in which he studied, in this class which involved the interaction of teacher and student.

The purpose of work avoidance orientation needs to be researched further, although this goal orientation leads to lower test anxiety, but it raises bad learning achievements, so we need to dig up further the causes-effect of this orientation, because it is found in many practices of teaching and learning.

Reference


