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ABSTRACT

How students perceive standardized tests and routine classroom tests on subject matter units was studied by surveying 61 fifth-grade and 65 eighth-grade students in public schools in Michigan. It was hypothesized that older students would more often distinguish between the types of test and would be more cynical and less motivated than would younger students, and that high-achieving students would express more positive attitudes in both grades compared to lower achieving students. The standardized test was the California Achievement Test. A 56-item survey assessed student attitudes. Fifth-graders did not distinguish between the types of test as much as did eighth-graders. Younger students had more positive attitudes. The highly discriminated attitudes of the eighth-graders suggest developing disillusionment with standardized tests, a growing sense of their unimportance, and a suspicion of their validity. By grade 8, students did not incorporate standardized test results in their perceptions of their own ability. A 9-item list of references is included. Three tables present study data and survey questions. (SLD)

Motivational Differences in Students' Perceptions of Classroom and Standardized Achievement Tests

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Standardized testing has become an increasingly common part of life in American classrooms — students of all ages routinely take standardized tests. The National Commission on Testing and Public Policy (1990) estimates that the equivalent of 20 million school days are spent each year by American children just taking standardized tests, and perhaps 10-20 times that many days are spent in preparation for the tests. This proliferation of testing is embedded in the movement for "accountability", a buzzword of the 1980's. Accountability has spurred sweeping indictments and reforms in education, and has become synonymous with performance evaluations, increased testing, and higher standards for students. In turn, these popular educational reforms have fueled reforms in educational assessment that attempt to enhance learning with better and more frequent evaluations of students' progress.

However, there has been little attention given to the impact of assessment policies and practices on teachers and students, the main participants in the accountability imperative. Reform efforts that concentrate solely on the psychometric and political aspects of testing can lead to a new psychometrically and politically sound assessment policy, but this policy runs the risk of negatively impacting the students and teachers by producing an increasingly debilitating and negative reaction to standardized testing. In our earlier research (Paris, Turner, Lawton & Roth, 1991), we found a developmental pattern of increasing cynicism and dissatisfaction with standardized achievement tests. This negative attitude is manifested in students' test-taking behavior. High school students, more often than elementary students, display negative attitudes and counterproductive test-taking strategies for standardized achievement tests.

The neglect of students' views of assessment is paradoxical given the vast research on the impact of students' attitudes and motivation on their academic performance (Blumenfeld, Pintrich, Meece & Wessels, 1982). For example, Weinstein (1983) has shown that students form coherent attitudes about school and the classroom climate that

strongly influence their achievement motivation. Students who believe external forces control their academic success show less interest in their work, demonstrate less persistence, and are more inclined to take shortcuts or adopt maladaptive strategies (Diener & Dweck, 1978). Other research has shown clearly that students adopt different goals for different tasks in the classroom. When students pursue mastery goals for learning instead of performance goals for comparative evaluation, they exert more effort, display more self-control, and feel greater self-efficacy (e.g., Ames & Archer, 1988).

Developmental trends are evident in students' view of schooling and ability. Younger children judge their ability based on effort and therefore possess an optimistic view of their ability. By middle school, they rely more on comparative information such as tracking, grades, and test scores as evidence of ability (Stipek & MacIver, 1989; Nicholls, 1990). Many students exhibit increasingly pessimistic and negative attitudes towards school and their own academic competence as they progress from elementary to high school (Eccles, Midgley & Adler, 1984).

Students' views of testing reflect developmental trends that are similar to their views of schooling. When school policies and practices focus on standardized test scores, students are lead to adopt performance goals and believe external forces are defining their success. This orientation towards assessment can have debilitating effects on students' motivation and learning. Therefore, we believe it is important to study students' developing attitudes and beliefs about assessment practices in school because of the impact their changing perceptions of school and assessment has on their motivation for learning. The present research is part of our continuing investigation of the effects of standardized testing on students, the neglected participants in current testing policies and practices.

This study was designed to compare how students perceive standardized achievement tests, such as the California Achievement Test (CAT), and routine classroom tests on subject matter units. We were interested in determining if students understood the differences between the tests in their purpose, form, importance, and use and visibility of

the results. If such differences were perceived, we wanted to know how these views were related to students' effort, control, and affect. On the basis of previous research on students' developing motivational orientations (e.g., Stipek & MacIver, 1989), we hypothesized that the two kinds of assessment might be discriminated by fifth graders but should certainly be distinguished by eighth graders. Specifically, we tested the following hypotheses generated from our previous studies: (1) Older students would distinguish between standardized achievement and classroom tests more than the younger students. They would be more cynical about the purpose, importance, and use of the standardized test. Also, they would express less motivation to do well, feel less prepared, and report more negative affect about standardized tests than the younger students. (2) The younger students would not differentiate between the two types of tests, and they would not express attitudes as negative or cynical towards either type of test. That is, they would regard both types of tests equally, and report motivation to do well on both types of tests. (3) Higher achieving students in both grades would express more positive attitudes towards both types of tests than lower achieving students.

Method

Subjects

Sixty-one fifth-grade students and 65 eighth-grade students attending public schools in Michigan participated in this study. There were approximately equal numbers of boys and girls in each grade. These were all the students present in the six classrooms during the administration of the survey. The survey was administered during May, 1990, shortly after the students took the California Achievement Test (CAT). The CAT total reading scores were used to identify higher and lower achieving students. Students who scored below the 53rd percentile on the reading subtests were classified as lower achievers ($N = 26$); students who scored above the 84th percentile were classified as higher achievers ($N = 54$).

Measure

A 56 item survey was constructed to measure how students perceived standardized achievement tests, such as the CAT, and routine classroom tests, such as the tests teachers give at the end of a science or social studies unit. Twenty-eight of the items pertained to the CAT test and 28 parallel items asked about classroom tests. The items were based on the following seven categories: uses of test results, personal goals for doing well on the test, importance of the test, visibility of test results, readiness to take the test, affect towards the test and its results, and fairness of the test. Thus, for each category, there were four items about the CAT and four parallel items about classroom tests. The students were asked to rate how much they agreed or disagreed with each statement on a 5 point Likert-type scale. The choices ranged from *strongly disagree* (1) to *strongly agree* (5).

Procedure

A female researcher administered the survey to six intact classrooms. Students were told the purpose of these questions was to see what students thought of the different types of tests they take in school. When the item asked about classroom tests, they were instructed to think about the tests their teacher gives at the end of a chapter or unit. For the questions about the CAT test, the researcher told them to think back to the CAT test they took a few weeks ago. The students were reminded that neither their teacher nor their parents would see their responses. They were encouraged to mark how they really felt since these were opinion questions without any right or wrong answer. Then the researcher led the class through a practice item to demonstrate how to use the rating scale. They were instructed to indicate how much they agreed or disagreed with the statements about the different tests they take in school by marking the corresponding number on their answer sheets. Survey items were presented using the overhead projector and read aloud by the researcher; students marked their responses on computer scannable answer sheets.

Results

The survey was designed with items in the seven categories, but analyses were not conducted using aggregate scores from these categories because a factor analysis failed to support the seven a priori categories. However, the students' responses to the 28 items pertaining to classroom tests and 28 CAT test items were summed to create two separate scores. A 2 (gender) x 2 (grade) x 2 (achievement level) x 2 (test type) repeated-measures ANOVA was conducted with gender, grade and achievement level serving as the between-subjects factors and test type serving as the with-in subjects factor.

A significant main effect for test type emerged. Students reported more agreement with the items pertaining to the classroom tests than with the items pertaining to the standardized test, $F(1,113) = 167.89$, $p < .001$. Also, there was a significant interaction between grade and type of test, $F(1,113) = 106.80$, $p < .001$. The responses to the standardized test items and the classroom test items did not differ for the younger students — they did not differentiate between the two types of tests. But, the responses of the older students did differ for the two types of tests. The older students reported more agreement with the items pertaining to classroom tests than with the items pertaining to the CAT test. There were no significant main effects or interactions for gender or achievement level.

Next, analyses were conducted on the items comprising the composite scores. Since the previous analysis did not result in significant main effects or interactions for gender or achievement level, these factors were dropped from the analyses. Each item was analyzed using a 2 (grade) x 2 (test type) repeated-measures ANOVA. Significant main effects for grade and type of test emerged for a majority of items.

Age Changes in Perceptions of Tests

Table 1 presents the mean responses to the 13 items that showed a significant main effect for grade. As shown by Table 1, fifth grade students reported significantly more positive attitudes towards tests in general than the eighth grade students. The older students reported different motivations for doing well on tests than the younger students.

The younger students were more likely than the older students to agree that they want to do well on tests to get a good grade, ($F[1,124] = 21.37$, $p < .0001$), while the older students reported more agreement than the younger students that they wanted to do well to get a higher score than the other students, $F(1,123) = 5.35$, $p < .05$.

The younger students placed greater importance on tests than did the older students. The younger students reported more agreement that their score on the test is important for their grade ($F[1,123) = 5.35$, $p < .005$) and to their teacher, $F(1,124) = 6.36$, $p < .01$ than did the older students.

The older students found their performance on the tests to be more visible. They were more likely to agree that other students know how they did on the tests ($F[1,124] = 15.70$, $p < .001$) and that they tell their friends their scores, $F(1,124) = 10.79$, $p < .001$.

The younger students felt more prepared for the tests and reported more positive affect towards the test than the older students. Younger students reported feeling more prepared for tests, $F(1,124) = 21.70$, $p < .001$. They were more likely to report that they know how to take tests ($F[1,124] = 4.65$, $p < .05$) and were more likely than the older students to report that their teacher helped them get ready for tests, $F(1,124) = 69.85$, $p < .001$. The older students were more likely to agree that they worry during tests , $F(1,124) = 6.99$, $p < .01$. Likewise, the younger students reported more agreement that they were relaxed when taking tests ($F[1,123] = 6.54$, $p < .01$) and were more satisfied with their scores on tests, $F(1,124) = 7.81$, $p < .01$.

Finally, the younger students found tests to be more fair than the older students. The older students agreed more than the younger students that the questions on tests are too hard ($F[1,124] = 29.30$, $p < .001$), the tests use words they do not know ($F[1,124] = 10.90$, $p < .01$), they are unfamiliar with the content of the tests ($F[1,124] = 4.51$, $p < .05$), and they were expected to know all the answers to questions on tests, $F(1,124) = 18.22$, $p < .001$.

Distinctions in Perceptions of the Two Types of Tests

All but four of the items showed a significant main effect for test type (see Table 2). Students reported more negative views towards the standardized test then towards classroom tests. Students reported that the standardized test is not as valid indicators of ability as are classroom tests. The students reported more agreement that classroom tests show how much they have learned ($F[1,124] = 50.46$, $p < .001$), show how smart they are ($F[1,123] = 32.12$, $p < .001$), show who the best teachers are ($F[1,122] = 20.99$, $p < .001$), and help decided which class students should be in, $F(1,123) = 40.72$, $p < .001$.

Students reported more motivation to do well on classroom tests than on the standardized test. They reported wanting to do well to get a good grade ($F[1,124] = 87.51$, $p < .001$), make their parents proud ($F[1,123] = 4.19$, $p < .05$), and to get a higher score than the other students ($F[1,123] = 21.14$, $p < .001$) more often for classroom tests than for the CAT.

Also, they also reported placing greater importance on the classroom tests than the standardized test. The students were more likely to agree that their scores on classroom tests are important for their grades ($F[1,124] = 215.39$, $p < .001$), to their teacher ($F[1,124] = 35.57$, $p < .001$), and to their self-esteem ($F[1,123] = 16.55$, $p < .001$) than their scores on the CAT.

The students reported that their scores on classroom tests were more visible than their scores on the standardized test. They reported that other students knew their scores on classroom tests more than on the CAT, $F(1,124) = 159.24$, $p < .001$. This may be because they reported telling their friends their scores more for classroom tests than for the CAT, $F(1,124) = 21.80$, $p < .001$. The reported that they knew what the CAT would be like more than classroom tests, $F(1,124) = 8.91$, $p < .01$. But, they reported more often that their teacher helped them get ready for classroom tests than for the CAT, $F(1,124) = 54.44$, $p < .001$.

Surprisingly, the students reported more positive affect for the standardized test than for the classroom tests. The students reported more agreement that they worry when taking classroom tests than they reported for the CAT, $F(1,1124) = 6.48$, $p < .01$. Likewise, they reported more satisfaction ($F[1,124] = 9.02$, $p < .01$), and less embarrassment ($F[1,124] = 12.83$, $p < .001$) with their CAT score than their scores on classroom tests.

Finally, the students reported that the classroom tests were more difficult than the standardized test. They reported that the questions on the test were too hard on the classroom test more often than they reported so for the questions on the CAT ($F[1,124] = 14.24$, $p < .001$). And, they were more likely to report that they are expected to know all the answers to questions on classroom tests than on the CAT, $F(1,123) = 22.03$, $p < .001$. But, they reported more agreement that the questions on the CAT use words they do not know than the questions on classroom tests, $F(1,124) = 10.24$, $p < .01$.

Perceptions of Each Type of Test By Grade

The main effects for grade and type of test do not convey the entire story. A significant interaction between grade and the type of test emerged for 17 of the items. Thus, simple effect analyses were conducted to interpret the interaction between grade and type of test. The fifth and eighth grade students' responses to the standardized and classroom test items were analyzed separately using two single-factor repeated-measures ANOVAs. Table 3 presents the mean responses by grade for all the standardized and classroom test items.

The fifth grade students' responses differed significantly for the standardized test and classroom test items on only eight of the items. The fifth grade students reported that classroom tests are more valid indicators of smartness than the CAT, $F(1, 121) = 4.64$, $p < .05$. But, they reported more motivation to do well on the CAT to show how much they know than on classroom tests, $F(1,121) = 4.30$, $p < .05$. Fifth grade students reported that classroom tests are more important for their grades than the CAT ($F[1,121] = 4.71$, p

< .05), but that CAT scores are more important to their parents than classroom test scores, $F(1,121) = 19.67$, $p < .001$.

Fifth graders reported that the results of classroom tests are more visible than the results of the CAT. They reported more agreement that other students know how they did on classroom tests than they reported for the CAT, $F(1,121) = 76.83$, $p < .001$. And, they were more likely to tell their friends how they did on a classroom test than on the CAT, $F(1,121) = 5.98$, $p < .05$.

The fifth grade students reported that their teacher helped them get ready for the CAT more than for classroom tests, $F(1,121) = 5.83$, $p < .05$. Also, they reported that the questions on classroom tests are too hard more often than they did for the questions on the CAT, $F(1,5.94$, $p < .05$.

Consistent with our hypothesis, the eighth grade students differentiated between the two types of tests more than the fifth grade students (see Table 3). Significant differences in their responses for the two types of tests were found for all but 5 of the 28 items. Eighth grade students reported that the classroom tests were better indicators of their ability than the standardized test. They indicated that classroom tests show how much they have learned ($F[1,129] = 71.13$, $p < .001$), how smart they are ($F[1,127] = 29.51$, $p < .001$), who the best teachers are ($F[1,125] = 22.22$, $p < .001$), and help decide which classes students should be in ($F[1,127] = 65.56$, $p < .001$) more than the CAT.

Eighth grade students showed more motivation for doing well on classroom tests than the standardized test. They reported wanting to well on classroom tests to show how much they know ($F[1,129] = 8.37$, $p < .01$), to get a good grade ($F[1,129] = 111.42$, $p < .001$), to make their parent proud ($F[1,127] = 15.37$, $p < .001$), and to get a higher score than the other students ($F[1,127] = 29.19$, $p < .001$) more than for the CAT.

The eighth grade students placed more importance on classroom tests than the standardized test. There were more likely to report that classroom tests, rather than the CAT, are important for their grades ($F[1,129] = 435.00$, $p < .001$), to their teacher

($F[1,129] = 74.13$, $p < .001$), to their parents ($F[1, 127 = 16.84$, $p < .001$), and to their self-esteem ($F[1,127] = 39.44$, $p < .001$).

They reported that other students know their scores on classroom test more often than they know their CAT scores, $F(1,129) = 84.64$, $p < .001$. Likewise, they reported more disclosure of their classroom test scores than of their CAT scores, $F(1,129) = 17.93$, $p < .001$.

The eighth grade students reported no difference in their readiness for classroom tests or the CAT. They reported feeling equally prepared for both types of tests ($F[1,129] = .34$, $p = .56$) and knowing how to take both types of tests equally well, $F(1,129) = 1.25$, $p = .27$. But, they did report that they know what to expect on the CAT more than on classroom tests, $F(1,129) = 6.37$, $p < .01$. They reported receiving more preparation from their teachers for classroom tests than for the CAT, $F(1,129) = 135.84$, $p < .001$.

These students reported more negative affect for classroom tests than for CAT. They reported worrying more about classroom tests ($F[1,129] = 19.86$, $p < .001$) and feeling less relaxed when taking classroom tests ($F[1,127] = 10.28$, $p < .01$). Similarly, they reported more satisfaction with their CAT scores ($F[1,129] = 13.09$, $p < .001$) and more embarrassment with their classroom test scores, $F(1,129) = 22.49$, $p < .001$.

Finally, they were more likely to report that the questions on classroom tests are harder than the questions on the CAT, $F(1,129) = 8.43$, $p < .01$. But, they reported that the questions on the CAT use words they did not know more often than for the questions on classroom tests ($F[1, 129] = 10.17$, $p < .01$), and that they were equally unfamiliar with the content of the two types of tests, $F(1,129) = .01$, $p = .93$. They did report that they were expected to be more familiar with the content on the classroom tests than that on the CAT, $F(1,127) = 23.17$, $p < .001$.

Discussion

This study illuminates several developmental trends in students' motivation and perceptions of standardized achievement tests. Our data confirm our previous studies and

anecdotal evidence of a growing disillusionment with standardized achievement tests as students gain more experience with them. The fifth graders in this study did not discriminate between the two types of tests to the same extent as the eighth graders. They held generally positive views of both types of tests which may reflect their pollyanish views of school or their limited negative experiences with educational assessment compared to the older students. The highly discriminated responses of the eighth grade students in the study suggest several trends in the developing disillusionment with standardized achievement testing.

One trend found both in this study and in our previous research is a growing sense of the unimportance of standardized achievement test scores and a suspicion of the validity of such tests. This trend does not appear to be a manifestation of a more negative view of schooling or assessment in general. Rather, as students acquire more experience with different forms of assessment, they question the validity and importance of standardized achievement tests but judge classroom tests to be useful and important measures of their ability.

The second trend is related to this cynicism towards standardized achievement tests. The results of classroom tests are more visible in both the fifth and eighth grades than the results of the standardized test. This may be a reflection of the lack of feedback about tests scores as well the lack of emphasis placed on standardized achievement test scores. Based on the assumption that standardized achievement tests are invalid, the students would not inquire about others' scores, and teachers and parents would not share the results with the students or make the scores public. Conversely, students may discredit standardized achievement tests as valid indicators of their ability because of the lack of knowledge of the test scores. Without such comparative information, students are unable to incorporate this knowledge into their developing notions of competence (e.g. Nicholls, 1990). In either case, by eighth grade, students fail to incorporate the results of standardized achievement tests into their perceptions of ability.

The disillusionment with standardized testing may explain the third trend—lower levels of anxiety and negative affective reactions towards the standardized test when compared to classroom tests. Students reported more debilitating anxiety during classroom tests, as well as more dissatisfaction with their scores. Again, an explanation for this surprising result may lay in the students' judgements of the importance and validity of the two types of tests. The classroom tests are judged as more important and more valid indicators of ability and therefore elicit more performance anxiety.

The fourth trend evident in this study, as well as in our previous research, is a decreasing motivation to do well on standardized achievement tests. This does not appear to be a trend for classroom tests. While fifth grade students are motivated to excel on both types of tests, eighth grade students express greater motivation for classroom tests. Thus, by the eighth grade, students are somewhat disillusioned and unmotivated for standardized achievement tests. The data presented suggest that the lack of motivation for the standardized test stems from the developmental disillusionment with standardized achievement tests that becomes pronounced by eighth grade and often debilitating in the secondary grades. Students who disdain standardized achievement tests are motivated to try only halfheartedly, to cheat, or to undermine their own performance which can exacerbate their own difficulties. Although no achievement differences were found in this study, our previous studies indicated that this trend was more pronounced for lower achieving students, perpetuating a cycle of low achievement.

Consequently, assessments of educational progress, particularly traditional standardized achievement tests, may become progressively more invalid and unreliable among older students. We believe that accountability and reform movements in educational assessment must give attention to the impact of tests on the attitudes, motivation, and learning of students if they are to achieve the goal of promoting a positive orientation to education.

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Table 1

Mean Responses to Items that Showed Significant Changes With Age

Item	Grade 5	Grade 8
I want to do well on the test to get a good grade.	4.2	3.6***
I want to do well on the test to get a higher score than the other students.	2.9	3.4*
How I do on the test is important for my grade.	4.0	3.2***
How I do on the test is important to my teacher.	3.5	3.0**
Other students know how I did on the test.	2.4	2.9***
I tell my friends how I did on the test.	3.1	3.7***
I felt prepared when I took the test.	4.0	3.3***
I know how to take tests like these.	4.4	4.1*
My teacher helped us get ready for the test.	4.2	3.0***
I worry so much when I take tests that I can't concentrate.	1.8	2.2**
I am relaxed when I take tests.	3.9	3.4**
I am satisfied with my score on the test.	4.0	3.7**
The questions on the test are too hard.	1.8	2.4***
The questions on the test use words I do not know.	1.8	2.3***
I am unfamiliar with the things they ask about in the questions on the test.	2.0	2.3*
I am expected to know answers to all the questions on the test.	2.6	3.3***

Note. * $p<.05$ ** $p<.01$ *** $p<.001$

Table 2

Mean Responses to Items Which Differed by Type of Test

Item	CAT	Classroom Tests
Tests show how much I have learned.	3.0	3.9***
Tests show how smart I am.	2.6	3.3***
Tests show who the best teachers are.	1.8	2.3***
Tests help decided which class students should be in.	2.4	3.2***
I want to do well on the test to get a good grade.	3.3	4.5***
I want to do well on the test to make my parents proud.	4.0	4.1*
I want to do well on the test to get a higher score than the other students.	3.0	3.4***
How I do on the test is important for my grades.	2.6	4.4***
How I do on the test is important to my teacher.	2.9	3.6***
How I do on the test is important to how I feel about myself.	3.1	3.5***
Other students know how I did on the test.	1.9	3.4***
I tell my friends how I did on the test.	3.0	3.7***
I knew what the test would be like.	3.9	3.5**
My teacher helped us get ready for the test.	3.2	4.0***
I worry so much when I take tests that I can't concentrate.	1.8	2.2**
I am satisfied with my score on the test.	4.0	3.7**
I am embarrassed by how I did on the test.	1.7	2.1***
The questions on the test are too hard.	1.9	2.3***
The questions on the test use words I do not know.	2.3	1.8**
I am expected to know answers to all the questions on the test.	2.6	3.3***

Note. * $p<.05$ ** $p<.01$ *** $p<.001$

Table 3

Mean Response to CAT Test and Standardized Test Items By Grade

Item	Grade 5		Grade 8	
	CAT	Classroom Tests	CAT	Classroom Tests
The test shows how much I have learned.	3.4	3.7	2.6	4.1***
The test shows how smart I am.	2.9	3.2*	2.3	3.4***
The test shows who the best teachers are.	1.9	2.1	1.7	2.6***
The test helps decided which class students should be in.	2.8	2.7	2.1	3.6***
I want to do well on the test to show how much I know.	4.2	4.0*	3.8	4.3**
I want to do well on the test to get a good grade.	4.0	4.3	2.5	4.6***
I want to do well on the test to make my parents proud.	4.2	4.0	3.7	4.2***
I want to do well on the test to get a higher score than the other students.	2.9	3.0	3.0	3.8***
How I do on the test is important for my grades.	3.8	4.2*	1.6	4.7***
How I do on the test is important to my teacher.	3.5	3.4	2.4	3.7***
How I do on the test is important to my parents.	4.2	3.7***	3.7	4.4***

Table 3 Continued

Item	Grade 5		Grade 8	
	CAT	Classroom Test	CAT	Classroom Test
How I do on the test is important to how I feel about myself.	3.3	3.2	2.8	3.8***
My parents know how I did on the test.	4.0	4.1	4.0	3.8
Other students know how I did on the test.	1.7	3.1***	2.1	3.8***
I tell my friends how I did on the test.	2.9	3.3*	3.3	4.0***
Only my teacher nows how I did on thetest.	2.1	2.2	2.2	2.1
I felt prepared when I took the test.	3.9	4.0	3.2	3.3
I knew what the test would be like.	3.9	3.7	3.9	3.4**
I know how to take tests like these.	4.4	4.4	4.0	4.2
My teacher helped us get ready for the test.	4.4	4.0*	2.1	4.0***
I worry so much when I take tests that I can't concentrate.	1.9	1.7	1.8	2.6***
I am relaxed when I take tests.	3.8	4.0	3.7	3.2**
I am satisfied with my score on the test.	4.1	4.0	4.0	3.4***
I am embarrassed by how I did on the test.	1.7	1.9	1.7	2.2***
The questions on the test are too hard.	1.6	1.9*	2.2	2.7**
The questions on the test use words I do not know.	1.9	1.7	2.6	2.0**
I am unfamiliar with the things they ask about in the questions on the test.	2.0	1.9	2.3	2.3
I am expected to know answers to all the questions on the test.	2.4	2.7	2.8	3.8***

Note. * p<.05 **p<.01 p < .001