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ABSTRACT

The assumption that the more able student can recognize a correct answer in a multiple choice situation more quickly than the less able student leads to the prediction that higher scores would be associated with shorter test-taking time. Research investigating this prediction have yielded mixed results, suggesting the need to examine other factors. This study evaluated the influence of Type A behavior on test-taking time and performance, predicting that Type As would complete examinations sooner than would Type Bs. At the beginning of the semester, 50 college students enrolled in an introductory psychology class completed the Jenkins Activity Survey for Health Predictions to determine their Type A (N=22) or Type B (N=28) classification. Test-taking time and performance measures were collected throughout the semester. Personality type and gender served as between-subject factors; six tests taken during the semester served as the within-subjects factor. Data analysis yielded significance for the gender, tests, and gender x personality type factors. Females scored higher than males; scores of Type B females were significantly higher than scores of other groups, while scores of Type B males were significantly lower than scores of other groups. The results failed to yield any support for the prediction that Type As would complete examinations sooner than Type Bs. The findings suggest that test-taking time is not related to this personality dimension. (NB)

Test-Taking Time, Performance, and the Type A Behavior Pattern

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Running head: TEST-TAKING TIME

Test-Taking Time, Performance, and the Type A Behavior Pattern

If one assumes that the more able student is able to recognize a correct answer in a multiple choice situation more quickly than the less able student, then a prediction concerning the relationship between test-taking time and performance becomes apparent. More specifically, it would be predicted that higher scores would be associated with shorter test-taking time. Despite the apparent logic of this prediction, it has not always stood the test. For example, Johnston (1977) reported that early finishers were likely to receive especially high OR especially low scores. On the other hand, J. J. Michael and W. B. Michael (1969) found that high scores were obtained by students who took a moderate amount of time. Other investigators (e.g., Paul & Rosenkoetter, 1980) have failed to find any relationship.

The majority of these studies have surveyed an introductory psychology class taking a multiple choice examination. Moreover, analysis of such data has been rather "coarse," i.e., few variables have been considered. Current studies appear to be rectifying this situation. For example, Davis, Thomas, Tramill, Grover, and Kixmiller (1987) evaluated possible gender effects

and reported that females tended to display the predicted negative relationship while males failed to display a consistent relationship.

The present study evaluated the influence of another variable, the Type A Behavior Pattern, on test-taking time and performance. One of the central characteristics of the Type A individual is a high level of competitiveness and achievement striving (Friedman & Rosenman, 1977). Thus, the prediction that Type As would be better prepared and might strive to complete examinations sooner than their type B counterparts seems reasonable.

Method

Subjects

Sixty-five students (38 males, 27 females) enrolled in an introductory psychology course at a regional, midwestern university served as the initial subject pool.

Testing Instrument

The modified Jenkins Activity Survery for Health Predictions (Krantz, Glass & Snyder, 1974) was employed to evaluate Type A/Type B characteristics. The modified JAS is a 21-item multiple choice questionnaire having a normative mean of 8 and a standard deviation of 4.

Procedures

The modified JAS was administered to all students at the beginning of the second class meeting of the semester. The remainder of the semester was devoted to the collection of the test-taking time and performance measures. The general procedure involved having the instructor note the time the students began work on an examination. Then, as completed papers were turned in, a notation concerning the elapsed time was made by the student's name on the class roster. This procedure allowed an evaluation of gender effects and performance patterns across the entire semester.

Results And Discussion

Prior to data analysis, the subjects were categorized as Type A or Type B on the basis of their JAS score. More specifically, scores above the normative mean of 8 were considered to be Type A, while scores of 7 and below were considered to be Type B. Those subjects scoring 8 (n = 15) were eliminated from further evaluation. The final pool of 50 subjects was distributed as follows: Type A (12 males, 10 females), Type B (17 males, 11 females).

An unweighted means, repeated measures analysis of variance was employed to analyze both the test score and test-taking time measures. In these analyses Personality

Type (A vs. B) and Gender (male vs. female) served as between-subjects factors, while the six semester Tests was the within-subjects factor.

Mean test scores for the Type A and Type B, males and females are shown in Table 1.

Insert Table 1 about here

Analysis of these data yielded significance for the Gender, Tests, and Gender x Personality Type factors. As can be seen from Table 1, the female scores were higher than those of the male subjects. However, further analysis (Newman-Keuls tests) of the significant interaction indicated that while the scores of the Type B females were significantly higher than those of the three other groups, the performance of the Type B males was significantly lower than that of the three other groups.

Mean test-taking time for the Type A and Type B, males and females is shown in Table 2.

Insert Table 2 about here

Analysis of this data yielded significance only for the Tests factor. Hence, in agreement with the test-score

data, the time measure indicated that all tests were not perceived as being equivalent.

Clearly, the present data fail to yield any support for the prediction that Type As would complete examinations sooner than Type Bs. In fact, these data suggest that test-taking time is not related to this personality dimension. This finding might be taken as another instance of a growing body of results indicating that the Type A personality is not as detrimental and/or pervasive as once appeared to be the case.

Only in the case of test scores is there some, albeit limited, support for an influence of personality type. However, given that Type A males scored higher than Type B males but Type B females scored higher than Type A females, this clearly is a gender-specific relationship. While the specifics of this relationship are not elucidated by the present study, it may be that a gender-specific, fear-of-success factor may have been responsible. Obviously, further research will be required to verify this interpretation.

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Table 1

Test scores as a function of personality type and gender.

Type A/B-Gender	Test Number					
	1	2	3	4	5	6
Type A Males	80.91	86.18	75.99	84.16	72.58	85.80
Type A Females	81.69	90.44	80.22	86.77	74.27	82.55
Type B Males	77.05	79.77	68.31	77.28	76.92	77.86
Type B Females	89.27	87.58	82.54	88.81	78.81	85.90

Table 2

Mean test-taking time (minutes) as a function of personality type and gender.

Type A/B-Gender	Test Number					
	1	2	3	4	5	6
Type A Males	27.07	35.27	27.57	20.04	29.92	27.41
Type A Females	24.99	31.36	25.38	20.59	22.54	27.38
Type B Males	25.99	34.19	27.93	20.99	26.51	30.63
Type B Females	26.99	33.15	28.07	22.05	24.21	30.92