

VALIDATION OF THE ENGLISH 2200 PRETEST AND THE TEST OF STANDARD
WRITTEN ENGLISH FOR THE EQUAL OPPORTUNITY COURSE

by

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Abstract

This study examined the validity of a commercial training pretest (English 2200) and the Test of Standard Written English (TSWE) for predicting student performance in the Defense Equal Opportunity Management Institute (DEOMI) equal opportunity (EO) advisor course. Subjects were the 94 students of class 90-1. The results showed that English 2200 and the TSWE were significantly correlated with each other, and both were significantly correlated with most course performance measures. Recommendations included continuing to administer the TSWE for research purposes, exploring the possibility of using the TSWE as a placement test for student English training in the EO course, and further validating the TSWE with measures of EO advisor performance in the field.

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The Defense Equal Opportunity Management Institute (DEOMI) runs a course on equal opportunity (EO) for EO advisors from the various Military Services. As with any course requiring writing and speaking skills, there is a concern about the baseline English ability of the entering students. Currently DEOMI uses a commercial standardized English instruction package (termed English 2200), which determines a student's English ability on a pretest and then directs the student toward a self-paced instruction level based upon the pretest results.

The problem with the English 2200 pretest is that it is not an independent indicator (i.e., predictor) of a student's baseline English skill, but rather it is a part of the initial training package at DEOMI. An independent test as a prior predictor of course performance would allow each Military Service to prescreen prospective students for DEOMI in order to classify them into the appropriate level for English instruction at DEOMI.

There are several advantages in prescreening potential students with an English test. First, the test could indicate which students need remedial English instruction. Second, from a personal perspective, each student classified as to English ability by this test would have a better chance of success (i.e., a student would be directed by the test to the appropriate level of English instruction necessary for him/her to complete the course). A student beginning the course with the belief that he/she is more apt to succeed should be thus be more motivated to perform. In motivational terms, the student's increased expectancy of success should increase motivation to perform (Vroom, 1964).

Third, from DEOMI's perspective, students could be assigned more equitably to writing groups. Groups would have a mix of student ability in English, which would produce more equitable demands on DEOMI trainers than having to deal with "problem" groups composed of individuals with English deficiencies or "easy" groups of individuals with few deficiencies. Fourth, from the perspective of the military, it has been estimated that the cost per student in the EO course in salary, travel, and per diem expenses is \$7739. This does not include DEOMI costs and the intangible costs of placing a less successful EO advisor in the field (Witt, 1989). Thus, it is in the military's best interest to identify students' initial skill level in English, direct them to the appropriate level of English instruction, and improve their chances for success in the course, thus protecting their investment in the student.

The present study examines the ability of the established English 2200 pretest to predict performance in the EO course. In addition, the study examines the relation of English 2200 to an

independent test of English ability--the Test of Standard Written English (TSWE)--and the ability of the TSWE to predict EO course performance.

In psychometric terms, it is proposed that a predictive criterion-related validation be carried out. The predictor (the TSWE) is measured first (before the course begins) and is then correlated with the criterion (measures of course performance) to determine how the TSWE relates to course performance (i.e., predicts course performance) (Anastasi, 1982).

The DEOMI EO Course

The purpose of the EO course is to train personnel from the various Services to become specialists in EO. At the time this study was conducted, the course consisted of lecture and small group training in several areas: socialization, individual and group behaviors, race and ethnic relations, discrimination, EO advisor skills, and Service specific policies and regulations. There are a number of evaluation points that combine into a course score for the student: tests on the unit material, a behavioral score, and a verbal skills score. The level of the course is considered to be college. In fact, the American Council on Education recommends 15 undergraduate credits for the 16-week course (DEOMI Curriculum Guide, 1988/89).

English 2200 Instructional Program

The English instruction program for the EO course is a programmed course with pretest occurring in three books (English 2200--the basics, English 2600, and English 3200--the advanced topics; Blumenthal, 1981). The student completes a standardized pretest which directs him or her to one of the three books. The books each present several units on English grammar and usage in a self-paced programmed text format. At the end of each unit the student takes a test. A passing score of 70 directs the student to the next unit. A score lower than 70 directs the student back over the material and to a second unit test. The course level is that of a college freshman.

The pretest consists of 75 items in multiple choice and written format that cover identification of figures of speech, correct word usage, punctuation, and capitalization.

Test of Standard Written English (TSWE)

The TSWE is a 30-minute test consisting of 50 multiple choice items covering the recognition of correct English grammar, usage, word choice, and sentence structure (Guidelines, 1989). The TSWE has been found to predict the probability of writing good essays during the freshman year of college (Breland, 1977).

Method

Subjects

Subjects were the 94 students of EO Class 90-1. The composition of the class was 75 Army (6 SSG, 61 SFC, 8 MSG), 15 Navy (4 PO1, 6 CPO, 4 SCPO, 1 MCPO), 2 Coast Guard (2 PO1), and 2 Army Reserve (2 MSG). Six students failed to complete the course.

Procedure

Students were administered both English tests at the beginning of the course and were tested on units as the course progressed.

Measures

English 2200 Pretest. The pretest consists of 8 sections: identifying figures of speech (10 items scored 1 point each), identifying phrases (e.g., prepositions, participles; 6 items scored 2 points each), word groups (e.g., fragment, run-on sentence; 5 items scored 2 points each), correct sentence structure (7 items scored 3 points each), correct word use (31 items scored 1 point each), correct punctuation (10 items scored 1 point each), correct apostrophe use (3 items scored 1 point each), and correct capitalization (3 items scored 1 point each). Thus, the total possible score is 100.

TSWE. The TSWE consists of items that identify errors in grammar and word use (35 items) and that select the appropriate sentence structure (15 items). The raw score of 1 point per item is converted into a scaled score ranging from 34 (raw score of 20) to 60+ (raw score above 45). Scores can also be converted into percentile ranks (21 for a raw score of 20, to 96 for a raw score above 45). Percentiles are based upon 1988 graduating high school students (Guidelines, 1989).

The TSWE is available in two forms: WWE58 and WWE59. The present study used form WWE59.

Course Scores. Seven scores ranging from 70 to 100 were available based upon unit tests: T-1 (interpersonal skills: motivation, self-concept, and values and attitudes), T-2 (interpersonal skills: communication, perception, and group dynamics), T-3 (ethnic groups: Hispanic, Black, Asian), T-4 (ethnic groups: Native American, Jewish; and prejudice, discrimination, and power), T-5 (racism, sexism, religion, and the new white consciousness), T-6 (women, institutional discrimination, and affirmative action), and T-7 (the EO advisor: leadership, organizational assessment, statistics, counseling skills, conflict management, action planning, and resistance to change).

In addition, there is an evaluation of student behavior in small group interaction by the trainers (T-8), a verbal score which is an average of evaluations on three oral assignments and three written assignments (T-9), and a test on material specific to the student's Military Service, such as rules, regulations, and policies (T-10). Finally, there is a course grade which is a weighted average of the first 9 scores (weights are 0.33 for T-1, 0.66 for T-2, 0.5 for each of T-3 to T-6, and 1.0 for each of T-7 to T-9). All T scores and the course average range from 70 to 100.

Results

Intercorrelation of English 2200 and TSWE

English 2200 and TSWE are significantly correlated, $r = 0.55$, $p < .01$, although the variance in common between the two tests is only about 30%.

Intercorrelation of English Tests with Course Scores

Table 1 shows the means and standard deviations of the various measures. Table 2 shows the intercorrelation of English 2200 and the TSWE with the 10 course performance scores. English 2200 significantly correlates with all course measures except T-5. The TSWE significantly correlates with all course measures except T-3, T-5, T-9, and T-10.

Table 1

Means and Standard Deviations of Measures

<u>Measure</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>n</u>
English2200	68.47	10.21	93
TSWE	34.80	9.05	93
Course Avg	84.85	8.32	94
T-1	85.53	9.08	94
T-2	88.64	6.98	94
T-3	91.23	6.02	94
T-4	87.61	11.98	94
T-5	90.76	6.78	92
T-6	89.65	7.41	91
T-7	83.13	10.31	90
T-8	80.62	14.11	94
T-9	79.97	13.07	94
T-10	90.32	7.27	88

Table 2

Intercorrelations of English 2200 and TSWE with Course Scores

Predictor	<u>Criteria (Course Measures)</u>						
	AVG	T-1	T-2	T-3	T-4	T-5	
English 2200	0.51**	0.31*	0.35**	0.25*	0.41**	0.24	
TSWE	0.46**	0.42**	0.32*	0.19	0.37**	0.19	
		T-6	T-7	T-8	T-9	T-10	
English 2200		0.44**	0.42**	0.41**	0.30*	0.27*	
TSWE		0.30*	0.36**	0.44**	0.22	0.23	

* $p < .05$

** $p < .01$

n = 87 (7 of the original 94 had missing scores)

Discussion

Intercorrelations

The two English tests significantly correlate with each other. Further, both tests significantly correlate with the course average score and with most unit course scores.

Preliminary data from EO Class 90-2 (in session during the present analysis) supports the first finding. For Class 90-2 the intercorrelation of English 2200 and TSWE is 0.71, $p < .01$, $n = 68$.

Neither English test correlates with T-5. The reason for this lack of relation is not clear. Two possible explanations are that either the content is more theoretical than that of other units (e.g., topics covering power, religious discrimination, feminism) or that the content is more heterogeneous than that of other units. In either case there is the probability that material other than language skills is being tested.

Surprisingly, the TSWE does not significantly correlate with the course measure of verbal skill (T-9). The T-9 score is an average of the scores on three oral presentations and three written assignments. The assessment checksheet on the oral presentation reveals that the student is evaluated on the mechanics of the presentation (introduction, organization, and

conclusion) and delivery skills (eye contact, gestures, facial expression, vocal intonation, and word use). Moreover, the checksheet on the written assignment reveals that the major points evaluated are introduction, body, conclusion, logical sequencing and readable writing (diction, sentence, and paragraph structure). In essence, it appears that both the oral and written scores comprising T-9 largely reflect assessment of skills other than basic English language ability as measured by the TSWE.

Limitations of the Study

The subject group (Class 90-1) may be somewhat unrepresentative of DEOMI classes in general. Most of the class consisted of Army NCOs (78%), which is typical of recent classes. There were relatively few students from the Navy and Coast Guard and none from the Air Force. Further, the fact that the Army assigns its NCOs to the class, while the other Services use volunteers may produce somewhat different types of motivation among the various Services. At the same time, it should be pointed out that these Army NCOs are strongly career-oriented and most likely approach this task with the same enthusiasm as they approach any other that they are assigned.

Recommendations

Three recommendations arise from this study.

1. DEOMI should continue to administer the TSWE for research purposes.

It is recommended that DEOMI administer the TSWE with the English 2200 pretest for the next several EO classes. First, Class 90-1 may be somewhat unrepresentative of Department of Defense NCOs. Therefore, a larger sample of students is needed to support the present results. Second, the TSWE and English 2200 are not highly correlated; there is not a large amount of common variance. Therefore, further data could be examined for similarities and differences between the two tests in terms of subtest scores for various types of students (e.g., education level, career specialty) and various areas of course content.

2. With further supportive data, TSWE should be able to serve as a placement test for identifying English skill level of DEOMI students.

TSWE and the established English 2200 test are significantly correlated (for both Classes 90-1 and 90-2). And both tests significantly correlate with (predict) overall course performance.

3. Validate the TSWE with performance measures of EO advisors in the field.

The TSWE scores of EO advisors, administered when they were DEOMI EO course students, could be correlated with performance measures taken later when they return to their duty stations. One alternative would be to use existing performance measures for criterion scores, such as performance effectiveness reports.

A better criterion performance measure would be a specific EO advisor effectiveness report constructed by DEOMI. This latter alternative could be customized by DEOMI for measuring several dimensions of performance influenced by the EO course, including verbal performance. The result would be a true field predictive validation study in which the predictor (the TSWE) is correlated with a later independent criterion measure of performance back on the job (the DEOMI-constructed effectiveness report).

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