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**An Analysis of Age, Gender, Education, and Race/Ethnicity as  
Performance Indicators on Tests of Perceptual Speed, Accuracy  
and Spatial Skills**

Gail C. Musgrave

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THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

AN ANALYSIS OF AGE, GENDER, EDUCATION, AND RACE/ETHNICITY  
AS PERFORMANCE INDICATORS ON TESTS OF  
PERCEPTUAL SPEED, ACCURACY AND  
SPATIAL SKILLS

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AN ANALYSIS OF AGE, GENDER, EDUCATION, AND RACE/ETHNICITY  
AS PERFORMANCE INDICATORS ON TESTS OF  
PERCEPTUAL SPEED, ACCURACY, AND  
SPATIAL SKILLS

by

GAIL C. MUSGRAVE, B.A.

RESEARCH PROJECT

Presented to the Graduate Faculty of Education

The University of Texas of the Permian Basin

in Partial Fulfillment

of Requirements

for the Degree of

MASTER OF ARTS

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

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## ABSTRACT

To ascertain the effect of age, gender, educational level and race/ethnicity on test performance, a battery of three tests measuring perceptual speed, accuracy, spatial orientation, and visualization was administered to a sample of 362 applicants in the Odessa, Texas, Job Training Partnership Act, an agency which retrain displaced workers. The sample was stratified into five age groups: 17-29, 30-39, 40-49, 50-59, and over 60. Further definition placed each person in one of five educational levels ranging from General Equivalency Diploma to Bachelor's degree. Multiple regression analyses determined the effect of the independent demographic variables. ANOVAS determined ethnic performance variations. As predicted, significant effect indicated that performance tended to decline with age; gender performance was task-related; and each increasing educational level raised mean scores. The performance level of each ethnic group--Blacks, Hispanics, and Anglos--varied based on the skill, indicating some significant differences between groups.