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Abstract

Adult students face many unique difficulties while pursuing the college education. The primary research question addressed in this paper is the following: Do traditional age students and students over traditional age differ in general education test performance? Data from a standardized test indicate that there were no significant differences between the two groups for the subjects of English, science, social studies. There was difference in math scores. The results of this study add further evidence that adult students have lower math achievement levels than do their younger counterparts. Implications for institutions are discussed.

Introduction

assessment that can be utilized to assess general education knowledge and the effectiveness of a general education program (Banta, 2002; Palomba & Banta, 1999). In the present study, we used standardized tests.

The purpose of this paper is to describe achievement differences between students of traditional age and students over traditional age. It

Table 1.

	Students than 25 N=	younger years old 796	Students and N=	25 years older 796
Gender				
Male	38.	38.7% 34.5%		.5%
Female	61.3%		65.5%	
Ethnicity/Race				
White/Caucasian	62.7%		68.8%	
African American	32.0%		23.6%	
Hispanic	1.0%		1.8%	
Asian/PI	1.5%		1.6%	
Other	2.8%		4.2%	
	M	<u>SD</u>	M	<u>SD</u>
Total credit hours completed	62.99	27.14	77.18	29.20

Background and demographic characteristics

Results

MANOVA was used to examine differences between the two groups for the four subject areas simultaneously, while ANOVA was used to examine the difference between the groups and the composite score. As indicated in Table 2, there were no significant differences in achievement levels between the two groups for the subjects of English, science, social studies, or the composite score. There was a significant difference in math scores between the two groups; however the effect size was quite small. Table 2.

Table 3.

Low/high score math groups

Math	<25	25 +	Total
Low			
N	123	161	284
%	43	57	100
High			
<u>N</u>	169	113	282
%	60	40	100
$x^2 - 15649 df - 1 m < 001$			

 $\chi^2 = 15.648, \, \underline{df} = 1, \, \underline{p} < .001$

Discussion

The results of this study add further evidence that adult students have lower math achievement levels than do their younger counterparts. This could be due to many factors, including time passed since they last took a college level math course, math anxiety, lack of, or a change in mathematics curricula. However, this study also points out that adult students and traditional students achieve at the same level in English, social studies, and science.

The results of this study can be used to inform decisions concerning an institution's general education curriculum and the assessment of this curriculum. Faculty who teach general education courses should be aware of the number of non-traditional students in these courses. Particularly, mathematics faculty may need to address the specific needs of non-traditional students. Further studies should focus on defining these needs and developing interventions to address them.

Institutional researchers should also be aware of these differences. When using the CBASE or other standardized tests as measures of assessment, researchers should take into

account this difference in traditional and non-traditional students. Standardized test scores reflect more than just the effectiveness of a general education curriculum. They also reflect differences in groups of students with similar characteristics, in this case, age. In order for the analysis of standardized test scores to be an accurate and fair means of assessment of general education curricula, the characteristics of non-traditional students must be taken into consideration.

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