Young GED Examinees and Their Performance on the GED Tests

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Abstract

GED Tests offer many young adults who have left school a second chance to gain a credential, yet many educators have concerns about policies for very young test-takers and how they perform on the GED Tests. The GED Testing Service sets the absolute minimum age for taking the GED Tests at 16 years of age. However, an individual jurisdiction may establish its own minimum age requirement for testing as long as it is not lower than 16 years. In the United States, 43 states and the District of Columbia require candidates to be 18 years old to receive a GED credential. Most states, however, allow individuals younger than their required minimum age to take the tests with additional documentation. This study provides a comprehensive picture of young adults between 16 and 19 years old taking the GED Tests. What are their academic and demographic characteristics? And how do state policies on minimum age and use of the Official GED Practice Tests (OPT) influence their performance on the GED Tests?

Study results show that younger GED examinees who needed additional documentation and approval before testing performed comparably on the tests to teenagers who met the states' standard minimum age requirements. The study also shows that states with stricter state age requirements may possibly encourage early test-takers to thoroughly prepare for the tests. In addition, the study suggests that taking and passing the OPT has a positive association with obtaining a GED credential.

Introduction

Rising numbers of recent high school dropouts are participating in adult basic education (ABE) programs (Hayes, 2000; Rachal & Bingham, 2004; Welch & De Tommaso, 2004; Perin, Flugman, & Spiegel, 2006). ABE programs regularly offer literacy instruction through preparation for the General Educational Development (GED) Tests. Correspondingly, the number of youth taking the GED Tests increased steadily in the early 1990s. Rachal and Bingham (2004) described this phenomenon as "the adolescentizing of the GED [Tests]". During the past decade, however, the percentage of youth ranging from 16 to 19 years old taking the GED Tests remained relatively stable at approximately 41 percent, as seen in Table 1. Although the changing demographics of adult education programs and GED examinees have received growing attention from researchers and adult educators, studies on this particular population regarding its characteristics and performance on adult education programs and the GED Tests are scarce. Hayes (2000) called for further research on the motivations of 16- and 17-year-old learners to enter adult education, on their characteristics, and on their GED credential outcomes. This study aims to answer that call. Specifically, this report focuses on GED candidates aged 16 to 19 years and aims to provide additional insight not found in previous studies about these young adults taking the GED Tests.

Table 1.

Percentages of Young GED Examinees, by Age: 1997–2007

Year	Age Group				
	16	17	18	19	16-19
1997*	2.8	11.8	15.0	11.8	41.4
1998*	2.9	12.1	15.5	12.0	42.5
1999*	3.2	12.4	16.9	12.8	45.3
2000*	3.1	12.7	16.6	12.2	44.6
2001*	2.9	11.4	14.8	11.2	40.3
2002	3.6	13.3	15.4	11.0	43.3
2003	3.2	12.4	15.0	10.9	41.5
2004	3.3	11.9	15.1	10.9	41.2
2005	3.4	12.0	14.6	10.6	40.6
2006	3.5	12.4	15.0	10.3	41.2
2007	3.4	12.4	15.2	10.4	41.4

*Note. * = U. S. plus Insular Areas and Freely Associated States.*

Reasons for the increase of youth enrollment in adult education are varied. Many researchers have agreed that there are four major factors that contribute to the growth of young adults in adult education programs (Imel, 2003). First, standards for high school graduation have increased, attributed to educational reform movements (Beckwith, 2002; Hayes, 2000). Second, the Adult Education and Family Literacy Act allows adult education programs in some states to be "viable alternatives of youth." Third, youth may lack the understanding that passing the GED Tests requires more than basic literacy and math skills. GED Tests are not a "quick fix" for young dropouts (Imel, 2003). Finally, few alternative programs have been created to serve the special needs of young dropouts (Beckwith, 2002; Hayes, 2000).

Characteristics of Young Adults in ABE and GED Preparation Programs

Perin, Flugman, and Spiegel (2006) studied four urban ABE programs and concluded that 16- to 20-year-olds in these programs were likely to have disabilities,

social and behavioral challenges, and court or mental health mandates to participate. Hayes (2000) interviewed many adult educators and found that young dropouts have a very negative image among the public. They were described as teens with academic, emotional, psychological, and behavioral problems. They also were perceived as directionless and thought to have poorly defined educational and career goals. Rachal and Bingham (2004) reported similar findings about the characteristics of youth in ABE and GED preparation.

GED Tests and Test Preparation

The Tests of General Educational Development (GED) provide adults who do not have a high school diploma with the opportunity to demonstrate their academic knowledge and skills. "Passing the GED battery of five content area tests and obtaining a state's high school credential or diploma promotes access to further education, better jobs, and the achievement of personal goals" (George-Ezzelle & Hsu, 2007, p. 3). Those who obtain scores high enough to earn a GED certificate outperform 40 percent of graduating high school seniors. Ninety-six percent of companies accept applicants with a GED credential for jobs requiring a high school degree (Society for Human Resource Management, 2002). Ninety-eight percent of colleges and universities that require a high school diploma accept the GED credential (College Board, 2007).

The GED Tests are made up of five content area tests: Language Arts, Writing; Language Arts, Reading; Social Studies; Science; and Mathematics. "Each test score is reported on a scale ranging from 200 to 800. To receive a credential based on passing the GED Tests, a candidate must earn a standard score total of 2,250 (equivalent to an

average score of 450) across the five tests, with no individual content area test score below 410 in the United States" (American Council on Education, 2007, p. 2).

Research has shown that test preparation classes and practice tests are positively related to test results, such as the SAT, GRE, GMAT, and MCAT (McLaughlin & Skaggs, 2007). However, how adults prepare for the GED Tests and how test preparation activities influence their testing performance remains unknown. Activities for test preparation include "drill and practice with feedback, exercises in strategies from various item formats and general test taking, subject-matter review, and/or skill development" (Scholes & Lain, 1997, p. 1).

McLaughlin and Skaggs (2007) studied test preparations of GED candidates in the 2004 test cycle. They found that the most reported test preparation activities were public school and community college adult education, individual study, and practice tests. Also, they found that "taking a practice test was associated with higher GED Test scores. Among the five tests, the effect was greatest for the Mathematics Test and for the overall test battery average. The effect was also greater for candidates enrolled in adult education than for candidates who chose individual study" (p. 31).

Minimum Age Requirement

GED Testing Service sets the absolute minimum age for taking the GED Tests at 16 years, with no exceptions. However, an individual jurisdiction may establish its own eligibility and minimum age requirement for testing and for awarding a GED credential as long as it is not lower than 16 years. The minimum age for taking the GED Tests varies from 16 to 19 years in the United States. Among all jurisdictions in the United States, 43 states and the District of Columbia require that candidates must be at least 18

years old before testing. However, most states allow individuals younger than their required minimum age to take the tests with additional documentation and requirements. "The types of additional documentation and approval required for younger candidates generally fall into one or more of the following categories: (1) proof of withdrawal from school or compulsory attendance has been met, (2) permission for testing from parent/guardian and /or school district, (3) court order, and (4) letter from requesting agency (for example, college official, employer, or military recruiter)" (American Council on Education, 2007, p.10). Table 2 summarizes state minimum age policies in the United States in the year 2006.

Table 2.

State Minimum Age Policies in the United States: 2006

Minimum Age for Testing	Age Exceptions Allowed	State
16	NA	ID, MD, NC
17	16	CO, CT, IA, MT
18	16	AL, AK, AZ, AR, DE, DC, FL, GA, HI, IL, KS, MA, MI, MS, MO, NE, NV, NH, NJ, NM, ND, OK, OR, PA, RI, TX, VT, VA, WY
18	17	CA, IN, ME, TN, UT
18.5	17	WI
19	16	KY, LA, MN, NY, OH, SD, WA, WV
19	17	SC

Note. NA indicates not applicable.

State minimum age policies play a critical role in deciding when young examinees can take the GED Tests. On one hand, state minimum age policies should be set in a way that encourages compulsory attendance instead of enticing students to leave high school; on the other hand, state minimum age policies could open another door to those who have already left high school for a variety of reasons and who have a desire to have a high

school equivalency credential. This study examines state minimum age policies and their effects on young examinees' test performance.

Since 2003, more than 700,000 candidates have taken the GED Tests each year. The age distribution of all GED candidates ranged from 16 to more than 90 years old. However, "young" candidates, aged 16 to 19, accounted for a large proportion of the whole population, approximately 40 percent to 43 percent of all candidates from 2002 to 2007 (see Table 1 for detailed percentages). In 2006, 56 percent of candidates aged 16 to 19 years old when tested were younger than their jurisdiction's minimum age, and required additional documentation to determine eligibility for taking the tests. What are the characteristics of those younger candidates who provided additional documentation for test-taking? How does the performance of those younger examinees requiring special approval compare with the performance of examinees meeting their jurisdiction's minimum age requirement?

The purpose of this study is to investigate characteristics of the GED examinees or candidates who needed additional documentation and/or approval before testing and how the state minimum age policies affect their performance on GED Tests. To identify the young GED examinees, the study examines the demographic, academic, social, and behavioral differences between GED candidates who were at the state minimum age and those who were under the minimum age but met the additional requirements. Furthermore, to examine the impacts of state age policies on examinee test performance, the study scrutinizes differences in the completion rates, pass rates, and standard scores of both groups across jurisdictions. The study also examines the relationship of age group with preparation activities, including type of preparation, length of preparation, and use

of Official GED Practice Tests (OPT). Finally, the study considers the role of the OPT for both groups in terms of passing the GED Tests and state prerequisites.

Method

The data analyzed in this study were from the GED Testing Service International Database (IDB). The IDB contains candidates' demographic and test scores collected from official GED Tests electronic scoring sites. A demographics survey with candidates' demographic and other background information was completed by examinees at the testing location.

Sample selection first involved extracting data from the 2006 GED Testing Service IDB on examinees who were first time test-takers in 2006. In addition, 2005 data were selected for analysis using the same methods for cross validation. Second, because the current study focused on test performance of candidates who were younger than the state minimum age and of candidates who were right at the state minimum age, records of candidates older than the state minimum age were not included in the data set. The final sample size for this study was 196,912 GED examinees. Candidates in the dataset were categorized into two groups: (1) the exception age group, which included examinees under the state minimum age and (2) the policy age group, which contained examinees at the state minimum age. For example, Alabama's required minimum age for testing is 18 years old; however, examinees aged 16 to 17 can take the GED Tests by submitting additional documentation. As a result, examinees from Alabama who were 16 or 17 were in the exception age group, and examinees aged 18 were in the policy age group for this state. There were 110,765 examinees in the exception age group and 86,147 in the policy age group in 2006 in the United States.

The personal and background variables selected for study were gender, race/ethnicity, highest education level, employment status, reasons for not completing high school, reasons for testing, test preparation methods, the use of Official GED Practice Tests, and average preparation hours. Descriptive statistics were presented to capture the general characteristics of examinees who were at exception age and at policy age. Independent *t* tests were conducted to compare test performance between the two groups. The alpha level for all significance tests in this study was set at the 0.05 level, which indicated that the observed differences between two groups would occur 95 times in 100, assuming the samples came from the same population.

Cohen (1988) suggested that the power of a statistical test depends on the sample size. Since each group had a large number of examinees to observe, any statistics based on this large sample size would turn out to be significant. Therefore, Cohen's *d*—defined as the difference between two means divided by the pooled standard deviation for those means—was calculated as a measure of effect size characterizing the magnitude of the differences between groups. Unlike significance tests, Cohen's *d* is independent of sample size. Also, calculating and reporting measures of effect size can assist researchers in distinguishing statistical and practical significance (Kirk, 1996).

Results

Demographic and Academic Characteristics of Young GED Candidates

Table 3 displays the demographic and academic characteristics of examinees, for both the exception age and policy age groups. Among the 196,912 young examinees who first tested in 2006, almost 89 percent of them completed the battery of tests in the same year (89 percent of the exception age group and 88 percent of the policy age group).

Among the 174,354 candidates who completed the battery of tests in 2006, 77 percent of them passed the GED Tests (77 percent of the exception age group and 76 percent of the policy age group).

The distribution of gender and race/ethnicity in both groups appeared to be similar. More male candidates took the GED Tests than female candidates in both groups (60 percent male versus 39 percent female, and 1 percent missing data). Percentages by ethnic group differed by one percentage point or less in the three most frequent ethnic groups: 58 percent of exception age candidates were white, compared to 57 percent of policy age candidates; 16 percent of exception age candidates and 17 percent of policy age candidates were African American; and 13 percent of exception age candidates and 14 percent of policy age candidates were Hispanic.

However, the academic characteristics of young GED candidates varied among both groups. As one would expect, the candidates in the exception age group reported lower completed grades. The most frequently reported highest education level of the exception age group was the 10th grade, in contrast to the 11th grade for the policy age group. Also, candidates in the exception age group were more likely to take the Official GED Practice Tests (OPT) before testing. Fifty-five percent of the policy age group reported that they took the OPT, while more than 73 percent of the exception age group reported doing so. Lastly, examinees in the exception age group spent more time preparing for GED Tests than those in the policy age group. The median preparation hours for those who prepared were 40 and 25, respectively (with 57 percent of candidates responding that they prepared). Median hours are reported because of a heavy concentration of candidates reporting under 100 preparation hours.

Table 3.

Selected Characteristics of GED Candidates, by Group: 2006

	Exception Age		Policy Age		Total	
Characteristic	N (110,765)		N (86,147)		N(196,912)	
	N	%	N	%	N	%
Completed a battery	98,714	89.1	75,640	87.8	174,354	88.5
Passed GED Tests	76,241	77.2	57,324	75.8	133,565	76.6
Gender						
Male	66,182	59.7	51,088	59.3	117,270	59.6
Female	42,976	38.8	33,841	39.3	76,817	39.0
Missing	1,607	1.5	1,218	1.4	2,825	1.4
Race/Ethnicity						
Hispanic origin or descent	14,435	13.0	12,430	14.4	26,865	13.6
American Indian or Alaska Native	2,426	2.2	1,674	1.9	4,100	2.1
Asian	1,554	1.4	1,360	1.6	2,914	1.5
Black, African American, African Descent	17,453	15.8	14,390	16.7	31,843	16.2
Native Hawaiian or Pacific Islander	710	0.6	632	0.7	1,342	0.7
White	64,005	57.8	48,289	56.1	112,294	57.0
Missing	10,182	9.2	7,372	8.6	17,554	8.9
Highest education level (Grade)						
None - 5	245	0.2	195	0.2	440	0.2
6	272	0.2	174	0.2	446	0.2
7	1,050	0.9	582	0.7	1,632	0.8
8	9,803	8.9	3,742	4.3	13,545	6.9
9	24,403	22.0	10,204	11.8	34,607	17.6
10	33,184	30.0	20,598	23.9	53,782	27.3
11	22,439	20.3	33,738	39.2	56,177	28.5
12	3,467	3.1	6,480	7.5	9,947	5.1
12+	392	0.4	710	0.8	1,102	0.6
Missing	15,510	14.0	9,724	11.3	25,234	12.8
Official Practice Tests						
Yes	80,265	72.5	47,501	55.1	127,766	64.9
No	24,021	21.7	31,443	36.5	55,464	28.2
Missing	6,479	5.8	7,203	8.4	13,682	6.9
Median preparation hours	40		25		32	
Range of preparation hours (for those who reported preparing) was 1 to 4,000 hours						

Table 4 presents the employment status of candidates in each group. Based on the design of the survey, candidates could select any response applying to their situations. The percentage of candidates reporting employment status was calculated by dividing the

number of candidates reporting at least one status by the total number of candidates within each group. Percentages of candidates indicating each employment status were calculated by dividing the total number of candidates who reported that status by the total number of candidates for whom employment status was known. According to Table 4, about 37 percent of the candidates of both groups were seeking employment. More candidates identified themselves as full-time students in the exception age group (26 percent) than those in the policy age group (14 percent). About 26 percent of candidates in the policy age group were employed full time, compared with 14 percent in the exception age group.

Table 4.

Employment Status, by Group: 2006

Employment status	Exception Age		Policy Age	
	N	%	N	%
Unemployed (seeking)	31,753	36.7	25,354	36.4
Employed full time	14,103	16.3	17,035	24.5
Employed part time	17,147	19.8	15,354	22.1
Full-time student	22,145	25.6	9,528	13.7
Part-time student	8,600	9.9	5,526	7.9
Not in labor force (by choice)	5,033	5.8	3,747	5.4
Not in labor force (homemaker)	1,055	1.2	1,090	1.6
Other	505	0.6	413	0.6
Permanent disability	388	0.4	268	0.4
Candidates indicating employment status	86,471	78.1	69,612	80.8
No answer	24,294	21.9	16,535	19.2

Note. Candidates could have multiple responses.

In many cases, candidates who took the GED Tests before they reached the policy age had special circumstances, such as being in the Armed Forces, Job Corps, or correctional facilities, undergoing home schooling, or becoming emancipated minors. The percentages of candidates who were in a correctional facility or were emancipated

minors were higher in the exception age group, as seen in Table 5. However, statistics reported for the current status should be used with caution due to the low response rate. Around 77 percent of candidates for the exception age group did not indicate their current status, and 81 percent of the policy age group did not. From Table 5 forward, all calculations of percentages for candidates' current status, reasons for not completing high school, reasons for testing, and preparation are the same as the calculations for employment status.

Table 5.

Current Status, by Group: 2006

	Exception Age		Policy Age	
Status at Testing	N	%	N	%
Single parent	5,212	20.2	5,377	32.5
Correctional facility	11,029	42.7	5,571	33.7
Receiving public assistance	3,723	14.4	3,585	21.7
Emancipated minor	6,934	26.9	3,013	18.2
Health facility	829	3.2	495	3.0
Candidates indicating current status	25,820	23.3	16,542	19.2
No answer	84,945	76.7	69,605	80.8

Note. Candidates could have multiple responses.

The demographic survey asked GED candidates about their reasons for not completing high school. They could select multiple reasons over a total of 43 choices, including social, academic, and personal reasons. The patterns for not completing high school appeared very similar for both groups, as seen in Table 6. "Was absent too many times" and "Did not like school" were the most reported reasons for not completing high school for the two groups. "Poor study habits" and "had trouble with math" were also indicated as important factors in discouraging high school students from staying in school.

Table 6.

Reasons for Not Completing High School, by Group: 2006

	Exception Age		Policy Age	
	N	%	N	%
Was absent too many times	33,148	46.9	26,163	44.7
Did not like school	35,105	49.7	24,253	41.4
Wasn't happy in school	28,386	40.2	20,475	35.0
Was bored	28,473	40.3	20,531	35.1
Poor study habits	23,699	33.5	18,757	32.1
Had trouble with math	21,363	30.2	18,393	31.4
Poor grades	22,607	32.0	16,096	27.5
Social life was more important	14,132	20.0	10,709	18.3
Did not feel part of the school	14,195	20.1	10,514	18.0
Had emotional problems	12,360	17.5	10,368	17.7
Got a job	10,803	15.3	10,693	18.3
Did not get along with teachers	15,709	22.2	9,962	17.0
Poor test scores	12,304	17.4	9,377	16.0
Poor teaching	12,290	17.4	9,475	16.2
Got suspended/expelled	14,746	20.9	8,914	15.2
Teachers did not help me enough	12,003	17.0	8,450	14.4
Could not adjust to school routine	10,818	15.3	8,258	14.1
Too old for my grade	11,290	16.0	8,719	14.9
Had problems with the law/police	13,854	19.6	7,472	12.8
Had problems with drugs	9,829	13.9	6,754	11.5
Couldn't work and study at same time	7,276	10.3	7,688	13.1
Did not get along with other students	8,834	12.5	5,943	10.2
School work was too easy	8,044	11.4	6,005	10.3

Table 6 continued

	Exception Age		Policy Age	
Reasons for not completing high school	N	%	N	%
Pregnancy	6,047	8.6	5,329	9.1
Personal/family illness	5,032	7.1	5,024	8.6
Lacked good place to study at home	5,725	8.1	4,914	8.4
Family moved too often	5,513	7.8	4,988	8.5
Needed to care for family member	5,833	8.3	5,790	9.9
Needed money to help out at home	4,756	6.7	4,335	7.4
School official told me to leave	4,958	7.0	4,323	7.4
Had problems with alcohol	5,738	8.1	4,031	6.9
Had trouble with reading	5,258	7.4	3,852	6.6
Other family member did not complete	5,874	8.3	3,828	6.5
School did not offer the courses I wanted	4,734	6.7	3,541	6.1
Job took too much time	3,369	4.8	3,534	6.0
Got married	3,594	5.1	3,137	5.4
School work was too hard	4,939	7.0	3,161	5.4
Homework was too hard	4,541	6.4	3,009	5.1
Did not feel safe at school	3,731	5.3	2,652	4.5
Parents did not support	1,757	2.5	2,091	3.6
Not enough vocational/technical courses	2,774	3.9	2,096	3.6
Didn't have enough money	872	1.2	1,124	1.9
Had trouble understanding English	1,459	2.1	1,099	1.9
Candidates indicating reasons	70,687	63.8	58,523	67.9
No answer	40,078	36.2	27,624	32.1

Note. Candidates could have multiple responses.

The demographics survey also asked GED candidates about their reasons for taking the tests, as shown in Table 7. The most popular reason for testing was “personal satisfaction” for both groups (42 percent of the policy age group and 41 percent of the

exception age group). More candidates at policy age tested to "get a better job" (31 percent versus 25 percent), while more candidates at exception age tested to "get first job" (14 percent versus 9 percent). In addition, educational advancement was a good motivation for young GED test-takers. However, the educational reasons to "enter two-year college" and to "enter four-year college" were slightly more popular for the candidates at policy age (30 percent and 24 percent, respectively, versus 28 percent and 22 percent for candidates at exception age).

Table 7.

Reasons for Testing, by Group: 2006

	Exception Age		Policy Age	
	N	%	N	%
Personal satisfaction	36,488	41.1	30,137	41.6
Get a better job	22,270	25.1	22,425	30.9
Enter two-year college	24,868	28.0	21,439	29.6
Enter four-year college	19,735	22.2	17,603	24.3
Enroll in tech/trade program	17,339	19.5	14,395	19.9
Other	19,468	21.9	12,319	17.0
Role model for family	13,077	14.7	10,567	14.6
Get first job	12,050	13.6	6,652	9.2
Job training	9,021	10.1	5,763	8.0
Military entrance	7,586	8.5	6,476	8.9
Employer requirement	5,230	5.9	5,302	7.3
Skill certification	6,378	7.2	4,792	6.6
Court order	5,873	6.6	2,690	3.7
Military career	3,756	4.2	2,846	3.9
Keep current job	2,462	2.8	2,284	3.2
Early release	4,652	5.2	1,752	2.4
Public assistance requirement	1,039	1.2	1,143	1.6
Candidates indicating reasons for testing	88,885	80.2	72,468	84.1
No answer	21,880	19.8	13,679	15.9

Note. Candidates could have multiple responses.

In terms of test preparation methods, "public school/adult class" and "Official GED Practice Tests" were the most two frequently used methods for both groups, as seen in Table 8. Candidates at exception age were more likely to take the Official GED Practice Tests (31 percent versus 22 percent) to prepare for a battery of GED Tests than the policy age group. The exception age examinees were more likely to be in the GED Option program, an alternative program for secondary education students that includes GED testing, before testing (12 percent versus 7 percent).

Table 8.

Test Preparation Methods: 2006

	Exception Age		Policy Age	
	N	%	N	%
Public school/adult class	24,650	29.8	19,791	29.8
Official GED Practice Tests	25,976	31.4	14,913	22.4
Home study	13,843	16.7	13,910	20.9
Self-taught	12,943	15.6	13,127	19.8
Internet/computer	9,341	11.3	8,038	12.1
Community college	8,558	10.3	7,155	10.8
None	4,617	5.6	6,511	9.8
GED Option program	9,707	11.7	4,547	6.8
Library	3,619	4.4	4,092	6.2
Correctional facility	7,871	9.5	3,663	5.5
Job corps	5,636	6.8	2,997	4.5
Home schooling	2,549	3.1	1,954	2.9
Community based organization	2,489	3.0	1,749	2.6
Employment/training program	1,735	2.1	1,255	1.9
Charter school	1,812	2.2	1,205	1.8
Private tutor	1,296	1.6	1,006	1.5
TV	1,110	1.3	878	1.3
Family literacy	707	0.9	617	0.9
Project challenge	2,661	3.2	514	0.8
Migrant worker/HEP program	396	0.5	336	0.5
Correspondence school	564	0.7	365	0.5
Workplace program	487	0.6	338	0.5
Distance learning	438	0.5	361	0.5
Literacy volunteer program	344	0.4	214	0.3
Church program (faith-based)	299	0.4	218	0.3
Military installation	533	0.6	281	0.4
Army “GED Plus”	353	0.4	365	0.5
Homeless program	160	0.2	107	0.2
Candidates indicating test preparation methods	82,788	74.7	66,429	77.1
No answer	27,977	25.3	19,718	22.9

Note. Candidates could have multiple responses.

Performance on GED Tests

Standard Test Scores

On average, candidates at policy age had higher test scores than candidates at exception age in every test area, except in mathematics, but differences were not practically significant. Table 9 displays standard score means and standard deviations for each content area and the whole battery for both groups. The Language Arts, Writing Test appeared to be the most difficult test for both groups. The Science Test was the easiest test for both groups. Independent *t* tests were conducted to examine the differences of the test performance between the two groups. The results showed that examinees at policy age tended to outperform those at exception age in Social Studies; Science; Language Arts, Reading; and the whole battery. However, examinees of exception age had higher scores in Mathematics than those of examinees of policy age.

Table 10 presents the detailed *t* statistics and the effect sizes. Although score differences between groups were statistically significant, no practical differences in scores occurred. Because of the unequal variances between the age groups, the Satterthwaite procedures, which rely on a calculation of degrees of freedom that differs from the calculation used when equal variances may be assumed, were reported as the approximate *t* statistic. Cohen (1988) defined effect sizes as "small, $d = 0.2$," "medium, $d = 0.5$," and "large, $d = 0.8$," stating that "there is a certain risk inherent in offering conventional operational definitions for those terms for use in power analysis in as diverse a field of inquiry as behavioral science" (p. 25). Based on Cohen's criterion, effect sizes for all significant tests did not reach the "small" level. It could be concluded that there were no practical mean differences between the two groups.

Table 9.

Standard Score, by Group: 2006

GED Test		Exception Age (N=110,765)	Policy Age (N=86,147)
Language Art, Writing	N	103,559	79,892
	Mean	472	473
	Std Dev	104.08	111.50
Social Studies	N	105,702	81,768
	Mean	499	505
	Std Dev	81.33	85.51
Science	N	105,750	81,496
	Mean	528	531
	Std Dev	83.80	88.01
Language Art, Reading	N	106,443	82,192
	Mean	521	526
	Std Dev	102.70	107.16
Mathematics	N	103,348	79,602
	Mean	488	486
	Std Dev	77.76	81.28
Total Score	N	98,175	75,645
	Mean	2520	2535
	Std Dev	356.60	379.00
Average Score	N	98,715	75,645
	Mean	504	507
	Std Dev	71.32	75.80

Table 10.

T Tests and Effect Sizes:2006

Variable	*df*	*t*	*p*	Cohen's *d*
Language Art, Writing	170,000	-0.18	0.856	__
Social Studies	170,000	-15.19	<.0001	-0.07
Science	170,000	-7.99	<.0001	-0.04
Language Art, Reading	170,000	-10.01	<.0001	-0.05
Mathematics	170,000	3.94	<.0001	0.02
Average score	160,000	-8.40	<.0001	-0.04

Note. __ represents Cohen's *d* effect size not calculated for statistically non-significant differences.

State-level Analysis

Test Status

Table 11 lists the completion and pass rates of candidates by group and state. Overall, among 196,912 young candidates who started testing in 2006, 174,354 (89 percent) completed the test battery in that year; this completion rate was higher than that of the whole population (86 percent). Among the young candidates who completed the battery, 133,565 (77 percent) successfully passed the GED Tests, which was much higher than in the whole population (69 percent) (American Council on Education, 2007). The completion rate was about the same across groups, 89 percent and 88 percent for the exception age and the policy age group, respectively. The pass rate was also similar across groups, 77 percent for the exception age group and 76 percent for the policy age group. Percentages of completers across states varied from 45 percent to 100 percent for candidates in the exception age group, and from 56 percent to 100 percent for candidates the policy age group. Percentages of passers among the examinees who completed the battery ranged from 56 percent to 100 percent for examinees at the exception age, and from 48 percent to 99 percent for the policy age group. Candidates in Delaware had the highest percentage (100 percent) of completers for both groups. Iowa had the highest percentage (100 percent) of passers for both groups.

In summary, the completion and pass rates were similar for both groups. The performance of examinees at the exception age group was equivalent to examinees at the policy age group. However, young examinees in both groups as a whole had higher completion rates than the whole population of the GED candidates in 2006.

Table 11.

Test Status, by Group and State: 2006

	Tested		Completed				Passed			
State	Exception Age	Policy Age	Exception Age		Policy Age		Exception Age		Policy Age	
	N	N	N	%	N	%	N	%	N	%
Alabama	2,878	2,168	1,988	69.1	1,543	71.2	1,106	55.6	738	47.8
Alaska	679	343	395	58.2	223	65.0	357	90.4	210	94.2
Arizona	2,495	1,637	2,277	91.3	1,427	87.2	1,764	77.5	1,141	80.0
Arkansas	2,319	1,046	2,292	98.8	1,031	98.6	2,020	88.1	914	88.7
California	4,498	7,222	3,742	83.2	6,009	83.2	2,844	76.0	4,501	74.9
Colorado	173	2,124	146	84.4	1,753	82.5	136	93.2	1,563	89.2
Connecticut	9	281	8	88.9	261	92.9	5	62.5	222	85.1
Delaware	78	106	78	100.0	106	100.0	74	94.9	102	96.2
District of Col.	122	137	118	96.7	128	93.4	71	60.2	81	63.3
Florida	8,915	9,001	8,272	92.8	8,373	93.0	6,534	79.0	6,093	72.8
Georgia	3,926	4,696	3,440	87.6	4,060	86.5	2,726	79.2	2,965	73.0
Hawaii	733	302	711	97.0	295	97.7	555	78.1	230	78.0
Idaho	—	484	—	—	346	71.5	—	—	304	87.9
Illinois	2,216	3,296	1,955	88.2	2,936	89.1	1,373	70.2	2,030	69.1
Indiana	2,000	2,175	1,915	95.8	2,072	95.3	1,656	86.5	1,688	81.5
Iowa	97	737	70	72.2	539	73.1	70	100.0	536	99.4
Kansas	1,000	635	982	98.2	621	97.8	884	90.0	561	90.3
Kentucky	3,369	997	3,310	98.2	978	98.1	2,616	79.0	802	82.0
Louisiana	3,982	933	3,934	98.8	904	96.9	2,987	75.9	574	63.5
Maine	520	712	392	75.4	542	76.1	358	91.3	497	91.7
Maryland	—	581	—	—	568	97.8	—	—	427	75.2
Massachusetts	1,963	1,712	1,809	92.2	1,530	89.4	1,403	77.6	1,163	76.0
Michigan	1,794	2,676	1,230	68.6	2,046	76.5	891	72.4	1,557	76.1
Minnesota	1,561	1,081	1,279	81.9	821	75.9	1,171	91.6	724	88.2
Mississippi	2,804	1,507	2,665	95.0	1,386	92.0	1,813	68.0	890	64.2
Missouri	2,272	1,798	2,240	98.6	1,765	98.2	1,775	79.2	1,412	80.0
Montana	179	667	150	83.8	581	87.1	126	84.0	486	83.6
Nebraska	495	488	378	76.4	365	74.8	346	91.5	328	89.9

Table 11 continued
Test Status, by Group and State: 2006

	Tested		Completed				Passed			
State	Exception Age	Policy Age	Exception Age		Policy Age		Exception Age		Policy Age	
	N	N	N	%	N	%	N	%	N	%
Nevada	1,135	743	1,120	98.7	728	98.0	860	76.8	532	73.1
New Hampshire	286	384	234	81.8	319	83.1	202	86.3	278	87.1
New Jersey	1,824	1,496	1,771	97.1	1,423	95.1	1,292	73.0	1,017	71.5
New Mexico	1,795	1,108	1,578	87.9	957	86.4	1,129	71.5	688	71.9
New York	12,727	5,480	12,462	97.9	5,293	96.6	9,266	74.4	3,305	62.4
North Carolina	—	1,285	—	—	905	70.4	—	—	798	88.2
North Dakota	373	219	264	70.8	153	69.9	235	89.0	137	89.5
Ohio	3,394	2,339	3,356	98.9	2,305	98.5	2,773	82.6	1,959	85.0
Oklahoma	1,666	1,080	1,646	98.8	1,063	98.4	1,179	71.6	798	75.1
Oregon	2,981	1,383	2,202	73.9	1,008	72.9	1,950	88.6	910	90.3
Pennsylvania	2,394	3,332	2,173	90.8	2,984	89.6	1,567	72.1	2,347	78.7
Rhode Island	372	398	243	65.3	238	59.8	211	86.8	202	84.9
South Carolina	2,613	785	2,575	98.5	773	98.5	1,785	69.3	527	68.2
South Dakota	593	180	425	71.7	123	68.3	359	84.5	112	91.1
Tennessee	2,640	1,901	2,610	98.9	1,875	98.6	2,015	77.2	1,457	77.7
Texas	9,568	6,321	8,370	87.5	5,462	86.4	5,877	70.2	3,919	71.8
Utah	851	1,559	809	95.1	1,513	97.0	672	83.1	1,274	84.2
Vermont	367	181	251	68.4	118	65.2	235	93.6	108	91.5
Virginia	4,183	2,971	3,884	92.9	2,775	93.4	3,092	79.6	2,116	76.3
Washington	5,301	1,496	3,845	72.5	1,035	69.2	3,406	88.6	933	90.1
West Virginia	1,660	485	1,642	98.9	475	97.9	1,157	70.5	327	68.8
Wisconsin	2,615	1,195	1,166	44.6	674	56.4	1,038	89.0	635	94.2
Wyoming	350	284	312	89.1	232	81.7	280	89.7	206	88.8
Total	110,765	86,147	98,714	89.1	75,640	87.8	76,241	77.2	57,324	75.8

GED Test Battery Score Means

The average score for the entire GED Test battery for the exception age group ranged from 472 to 535. For the policy age group, it ranged from 462 to 545. The total score for the exception age group ranged from 2,361 to 2,722; the policy age group

ranged from 2,312 to 2,732. Table 12 lists test score means and *t* tests between two groups for their mean score differences.

Table 12.

Test Score Means, by Group and State: 2006

	Mean Average Scores		Mean Total Scores					
	Exception		Exception					
State	Age	Policy Age	Age	Policy Age	*df*	*t*	*p*	Cohen's *d*
Alabama	472	462	2,361	2,312	3,529	3.43	<.0001	0.12
Alaska	532	542	2,660	2,711	616	-1.85	0.07	__
Arizona	505	511	2,525	2,557	3,702	-2.59	0.01	-0.09
Arkansas	517	527	2,585	2,635	1,833	-4.07	<.0001	-0.19
California	503	506	2,513	2,529	8,270	-2.20	0.03	-0.05
Colorado	529	529	2,643	2,647	1,897	-0.13	0.90	__
Connecticut	504	537	2,519	2,687	267	-1.15	0.25	__
Delaware	544	544	2,722	2,720	182	0.04	0.97	__
District of Col.	479	486	2,397	2,431	244	-0.66	0.51	__
Florida	510	504	2,552	2,522	17,000	5.45	<.0001	0.08
Georgia	506	503	2,528	2,516	7,471	1.37	0.17	__
Hawaii	511	509	2,554	2,545	1,004	0.36	0.72	__
Idaho	__	527	__	2,634	__	__	__	__
Illinois	490	494	2,449	2,470	4,362	-1.94	0.05	-0.06
Indiana	517	515	2,585	2,573	3,983	1.11	0.27	__
Iowa	515	537	2,576	2,687	107	-4.12	<.0001	-0.50
Kansas	528	539	2,639	2,696	1,601	-3.41	<.0001	-0.17
Kentucky	499	507	2,494	2,535	4,286	-3.71	<.0001	-0.11
Louisiana	498	483	2,489	2,417	1,209	5.04	<.0001	0.29
Maine	526	536	2,628	2,681	932	-2.54	0.01	-0.17
Maryland	__	505	__	2,526	__	__	__	__
Massachusetts	506	508	2,530	2,540	3,176	-0.81	0.42	__
Michigan	497	511	2,486	2,556	3,274	-5.14	<.0001	-0.18
Minnesota	533	531	2,666	2,653	2,098	0.87	0.38	__
Mississippi	478	479	2,389	2,393	2,644	-0.39	0.70	__
Missouri	513	519	2,566	2,593	4,003	-2.31	0.02	-0.07
Montana	514	518	2,568	2,589	729	-0.61	0.54	__
Nebraska	528	538	2,638	2,689	741	-2.19	0.03	-0.16

Note. __ stands for not applicable.

Table 12 continued
Test Score Means, by Group and State: 2006

State	Mean Average Scores: Exception Age	Mean Average Scores: Policy Age	Mean Total Scores: Exception Age	Mean Total Scores: Policy Age	DF	t	p	Cohen's *d*
Nevada	500	498	2,498	2,491	1,846	0.47	0.64	__
New Hampshire	530	539	2,652	2,697	551	-1.46	0.15	__
New Jersey	500	500	2,501	2,498	3,196	0.21	0.84	__
New Mexico	496	504	2,480	2,519	1,899	-2.44	0.01	-0.11
New York	504	486	2,520	2,432	9,358	14.33	<.0001	0.30
North Carolina	__	521	__	2,606	__	__	__	__
North Dakota	511	533	2,556	2,666	415	-3.72	<.0001	-0.37
Ohio	516	520	2,581	2,601	5,659	-2.27	0.02	-0.06
Oklahoma	490	500	2,450	2,499	2,707	-3.57	<.0001	-0.14
Oregon	530	543	2,652	2,713	1,845	-4.44	<.0001	-0.21
Pennsylvania	492	509	2,461	2,547	4,889	-8.79	<.0001	-0.25
Rhode Island	519	526	2,595	2,632	479	-1.16	0.25	__
South Carolina	488	491	2,441	2,453	1,166	-0.72	0.47	__
South Dakota	521	528	2,606	2,641	546	-1.12	0.26	__
Tennessee	493	502	2,467	2,509	3,818	-4.34	<.0001	-0.14
Texas	491	500	2,453	2,498	14,000	-6.47	<.0001	-0.11
Utah	518	523	2,590	2,617	2,320	-1.59	0.11	
Vermont	535	534	2,673	2,672	200	0.04	0.97	__
Virginia	500	503	2,500	2,513	5,485	-1.46	0.15	__
Washington	530	545	2,648	2,725	1,574	-6.36	<.0001	-0.32
West Virginia	490	490	2,448	2,452	2,115	-0.18	0.86	__
Wisconsin	529	546	2,647	2,732	1,838	-5.47	<.0001	-0.26
Wyoming	529	537	2,643	2,687	542	-1.52	0.13	__

Note. __ stands for not applicable.

Test performance of young GED candidates varied across states. In two states—Louisiana, $t(1,209)= 5.04$, $p<0.001$, and New York, $t(9,358)= 14.33$, $p<0.001$—candidates at exception age performed significantly better than the candidates at policy

age. The effect sizes for Louisiana (d= 0.29) and New York (d= 0.30) were small to medium based on Cohen's criterion, which indicated that mean test score for candidates at exception age is 0.29 standard deviation higher than those at the policy age group in Louisiana and 0.30 in New York.

On the other hand, candidates at policy age had significantly higher scores than those at exception age in five states: Iowa, $t(107)= -4.12$, $p<0.001$; North Dakota, $t(415)= -3.72$, $p<0.001$; Pennsylvania, $t(4,889)= -8.79$, $p<0.001$; Washington, $t(1,574)= -6.36$, $p<0.001$; and Wisconsin, $t(1,838)= -5.47$, $p<0.001$. Effect sizes for the five states ranged from small to medium: Iowa (d= -0.50), North Dakota (d= -0.37), Pennsylvania (d= -0.25), Washington (d= 0.32), and Wisconsin (d= 0.26).

Official GED Practice Tests and Age

Differences in state testing policies may help explain the differences of performances on GED Tests between the two groups. When all U.S. states were considered, there was a statistically significant association between taking the Official GED Practice Tests (OPT) and age group, $\chi^2 = 6004$, $p < 0.001$. The odds of taking the OPT in the exception group are almost 2.2 times the odds of taking the OPT in the policy age group.

In 2006, New York and Louisiana had stricter eligibility standards than other states and may have encouraged candidates at exception age to better prepare. Both New York and Louisiana required individuals at exception age to pass the OPT before testing in 2006. Louisiana and New York have adult education programs, and enrollment in one of these programs is one of the eligibility requirements (American Council on Education, 2007).

Among the five states in which candidates at policy age outperformed the exception age group, none require the exception age group to pass the OPT to be eligible for testing. In these five states, the odds of taking the OPT at exception age are almost 1.60 times the odds of taking the OPT at policy age, somewhat lower odds than for the United States overall yet still significant, $\chi^2 = 194$, $p<0.001$. Only Iowa requires candidates to pass the OPT before testing among the five states; this requirement is for all candidates and is not restricted only to candidates at exception age.

Official GED Practice Tests and Passing Status

A related question about the Official GED Practice Tests considered whether an association exists between taking the OPT and passing the GED Tests. For both age groups combined, the odds were 0.93 times higher that candidates taking the OPT would pass the GED Tests than candidates passing them without taking the OPT. For the exception age group, the odds that candidates taking the OPT would pass the GED Tests were 0.89 times higher than candidates passing them without taking the OPT. The association between taking the OPT and passing GED Tests was not significant for the policy age group. These data indicate that taking the OPT is likely to have a positive association with passing the GED Tests for young candidates, but particularly for those at exception age.

A final analysis involving the OPT and GED Tests passing status examined eight U.S. states that required the OPT as a prerequisite to taking the GED Tests. In these eight states, the association between age group and passing status was not significant. While age group is not relevant to passing status in these eight states, it is important to note that 87 percent of completers in those eight states passed the GED Tests, in contrast to a 77

percent pass rate in all U.S. states and a 76 percent pass rate in states that do not require the OPT.

Cross-validation and Limitations

Data from 2006 were cross-validated in identical analyses of 2005 data. Results from 2005 were comparable to 2006 findings. Candidates' characteristics in 2005 were the same as those in 2006. Among the 193,349 younger examinees who started testing in 2005, almost 89 percent of them completed the battery of tests in the same year (88 percent of the exception age group and 90 percent of the policy age group). Among the 172,719 candidates who completed the battery of tests in 2005, 79 percent of them passed the GED Tests (79 percent of the exception group cohort and 78 percent of the policy age group). The distribution of gender and ethnicity in both age groups appears to be similar. More male candidates took the GED Tests than female candidates in both age groups (60 percent male versus 40 percent female).

Distributions of current status and employment status for candidates were the same for 2005 and 2006. "Personal satisfaction" stayed as the most popular reason for testing for both years. The patterns for not completing high school appeared very similar for both years. Candidates in the exception age group outperformed those in the policy age group in Louisiana and New York, which is the same as 2006. The cross-validation findings suggest that results from 2006 were not unique and that the candidate data were consistent in both years.

It is essential to list a few limitations relevant to the findings. First, this study is descriptive in nature, and no causal findings should be inferred. Secondly, candidates were not required to respond to the question about taking the OPT, and candidates who

did respond self-reported that they took the OPT, so it is unclear exactly how many candidates actually took the OPT. No differences in response to this question by age were apparent though. Also, the two age groups do not represent mutually exclusive ages. In one state, policy might require a minimum age of 17 years, and so 17-year-olds would be included in the policy age group; in a different state with a minimum age of 18 years, the 17-year-olds would be included in the exception age group. Finally, the study did not differentiate GED Option Program candidates from regular GED Tests candidates. Demographic and academic characteristics of young candidates might be different for those two groups.

Summary of Findings

In 2006, a total of 196,912 candidates aged 16 to 19 years old took the GED Tests. Nine of every 10 test-takers completed the test battery in the same year, and approximately eight out of every 10 of those passed the tests. As in other age groups, the majority of the young test-takers were male (60 percent). Fewer young minorities took the tests compared with the nationwide percentage. The most frequently reported grade the young candidates completed was the 11th grade for the policy age group and the 10th grade for the exception age group. The probability of preparing for the GED Tests with an Official GED Practice Test was higher in the exception age group. Candidates in both groups reported similar reasons for testing, such as personal satisfaction, getting a better job, and educational advancement.

Overall, it can be concluded that testing performance of examinees in both exception age and policy age groups were comparable to each other. A prerequisite of passing the Official GED Practice Tests before GED testing, particularly for exception

age candidates, may have a positive relationship with performance of GED candidates. Candidates in the exception age group are more likely to take the OPT than policy age candidates, and if they do take the OPT, they are more likely to pass the GED Tests than policy age candidates who take the OPT. In eight states where the OPT is required, the pass rate was higher for young candidates than in states in which there was no OPT prerequisite.

Discussion and Policy Implications

This study shows that younger GED examinees who need additional documentation and approval before testing were comparable with young adults in the policy age group with respect to testing performance. The standard scores were about the same for both groups in general. However, examinees at policy age achieved significantly higher mean test scores for the battery in five states (Iowa, North Dakota, Pennsylvania, Washington, and Wisconsin), with effect sizes ranging from small to medium. And in New York and Louisiana, the exception age group outperformed the policy age group, with the effect sizes of the mean differences between the two groups also ranging from small to medium.

With an additional year of school, on average, candidates at policy age in five states performing significantly better than candidates at exception age is not a surprising finding. Less intuitive findings are that young candidates from both groups generally scored well above average and had comparable test performance across groups.

These findings do not substantiate a common perception that young adults are not prepared to take a high school equivalency exam and that the youngest candidates would likely not do well on the GED Tests. Nor do these data suggest the GED Tests are a

"quick fix" (Imel, 2003). It is remarkable that eight out of 10 candidates passed the GED Tests, which are developed with sufficient rigor that 40 percent of high school seniors would not pass them. On average, both groups scored much higher than the 410 minimum on any one content area test, and even somewhat higher than the 2,250 minimum required for the entire battery. While individual variability in scores and passing status is to be expected, clearly most young candidates in this study were well prepared to pass the GED Tests.

At the same time, states with stricter age requirements may possibly encourage early test-takers to better prepare for the tests. More preparation may contribute to "evening out" the scores of candidates at exception age and those of policy age; that is, exception age test-takers may perform comparably with policy age test-takers, despite the latter's extra year of high school, because of additional preparation. One piece of evidence of additional preparation is time spent preparing; exception age test-takers reported spending more time preparing, on average. Candidates most frequently report preparing via class instruction (which could occur in public schools or other adult education programs) and home study. Candidates at exception age are less likely to study at home or be self-taught than policy age examinees, and types of preparation may also play a role in overall better preparation.

Another piece of evidence for preparation is taking the OPT. GED candidates at exception age were more than twice as likely to report taking the OPT than those at policy age. Examinees from the exception age group who take the OPT are more likely to pass the GED Tests than those who do not take the OPT. It may not be a coincidence that both New York and Louisiana, where the OPT was a prerequisite, also saw significantly

higher test scores for exception age candidates than for policy age examinees. While the significant association of taking the OPT with passing the GED Tests is encouraging for all candidates in the study, it may be particularly beneficial to exception age examinees who generally start out with one year less of high school education.

The findings of additional preparation have implications for policy, for instruction, and for other stakeholders concerned with assisting dropouts to complete their secondary education. It is important to note that GED Tests are intended to meet the credentialing needs of adults, both young and old, who are already outside the K–12 educational system. GED Administrators could compare the relationship of age, preparation, and performance for the youngest candidates in their state. This comparison might be especially valuable in states considering higher compulsory education ages or stricter graduation requirements. Local adult education administrators could monitor National Reporting System data to look for a potential relationship between time spent studying for the GED Tests, types of preparation, and GED credential outcomes. Both types of administrators could identify an optimal amount of time for test preparation to set policy or to share with instructors as they encourage candidates to prepare carefully and thoroughly.

Stakeholders of GED testing and those working with at-risk students may also benefit from the study's findings. While a median amount of preparation time of 32 hours for those who reported preparing may not seem substantial in a typical secondary setting, those hours are likely to pass much more slowly if the candidate studies at home around other activities or in a part-time adult education program, where instructional time may average just four to six hours per week. Furthermore, with a potential range in preparation

time up to 4,000 hours, even self-disciplined candidates may find themselves taking months to prepare.

Parents who want to help their young adult son or daughter make a decision about whether to take the GED Tests need to understand that the choice could involve substantial preparation time, and that a classroom setting might be more valuable to a young adult at exception age than studying at home.

High school and college counselors, judges, mental health-care providers, rehabilitation staff, and youth employment personnel need to be aware that GED Tests offer a second chance but not a "quick fix" before they advise, or even mandate, young adults to pursue a GED credential (Imel, 2003). As they advise potential dropouts, high school counselors or other secondary education personnel concerned about graduation rate calculations (Beckwith, 2002; Hayes, 2000) also need to reflect on the likely amount of preparation time for and the difficulty of the GED Tests. Perin, Flugman, and Spiegel (2006) suggested that young adults in the Adult Basic Education programs should be separated into different classes based on their age and provided individual classes to complete their secondary education more successfully. The OPT can provide a realistic foretaste of the difficulty of the GED Tests for stakeholders who want to see young adults well prepared for the requirements of testing.

But does any advantage of the OPT toward preparation for testing relate to state policy requirements or to an individual's choice to take it? The analysis of eight states having OPT prerequisites showed no association between passing the GED Tests and age; candidates from either age group in the eight states were as likely to pass the GED Tests. Still, the pass rate in these eight states was 87 percent, compared with a 76 percent

pass rate in states not requiring the OPT as a prerequisite. The role of the OPT in passing the GED clearly warrants further study.

At the state and local levels, adult educators and GED Administrators could investigate the relationship of OPT success with actual GED credential outcomes for adults in their programs. GED Administrators could work with adult educators and policy makers to weigh the potential benefits and risks of an OPT prerequisite for the state. If requiring the OPT does increase the GED Tests pass rate, administrators and policy makers would want to consider the additional costs associated with offering the OPT prior to the GED Tests, the increased responsibility for preparation on the part of instructors and candidates, and previous experiences of states with high pass rates and OPT prerequisites.

High school and college counselors, mental health-care providers, rehabilitation staff, and youth employment personnel could familiarize themselves with the OPT and state prerequisites (if any) in order to enhance advice they offer clients who might drop out of high school or who already have dropped out. With a clearer understanding of the OPT and issues of preparation, they will be able to adjust expectations along with the young adult for estimating future performance in the classroom, achievement of mental health or rehabilitation objectives, and setting educational and employment goals (Hayes, 2000; Rachal & Bingham, 2004) within realistic timeframes.

Directions for Future Research

This study examined 2006 GED Testing Service IDB data for characteristics of young adults and their performance on the GED Tests. The 2005 GED Testing Service IDB data were analyzed for cross-validation. Future research should explore the trend of characteristics of those young adults who take the GED Tests. Are there any changes in

their demographics? Are their reasons for testing consistent through the years? Are their test preparation activities changing over time? Those trends have important implications for young adults who are preparing for GED Tests and adult educators who help young adults completing secondary education through GED Tests.

Also, this current study investigated the relationship between the OPT and young adults' testing performance and suggested that taking and passing the OPT has a positive association with obtaining a GED credential. Future studies should examine whether the relationship between the OPT and testing performance stays unchanged over time. In addition, future studies should examine how the change of individual jurisdictions' minimum age policy influences young adults' decision of taking tests and their testing performance.

Furthermore, the present study captured the general picture of young adults' testing performance. Future studies should inspect the interactions of their testing performance on the whole battery and five subject areas with demographic variables, such as gender, race/ethnicity, primary language, and socioeconomic status.

Finally, the current study focused on GED candidates between 16 and 19 years old. Future studies should include other segments of the GED candidate population and their characteristics, testing performance, and the influence of state policy on their decision making related to GED Tests.

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