

DOCUMENT RESUME

ED 086 807

CE 000 830

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TITLE Analysis of Survey Findings Concerning the USAFI High School GED Program.
INSTITUTION Air Force Human Resources Lab., Alexandria, Va.
SPONS AGENCY Manpower Development Div.
Office of the Assistant Secretary of Defense for Manpower and Reserve Affairs (DOD), Washington, D.C.
DIRECTORATE for Manpower Research.
REPORT NO AFHRL-TR-73-64; OASD-MRA-MR-73-2
PUB DATE Dec 72
NOTE 39p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Administrative Problems; *Adult Education Programs; *Armed Forces; *Educational Administration; *Educational Programs; *Equivalency Tests; Learning Motivation; Military Personnel; Military Training; Participant Satisfaction; Veterans

ABSTRACT

The study is the third of a series concerning the function of the U.S. Armed Forces Institute (USAFI) High School General Educational Development (GED) program. Information was sought to enable GED program managers to improve the effectiveness of their programs. Questionnaires were sent to a stratified random sample of 1,000 recent former Army personnel from each of the following groups: those who had passed the GED at both the Department of Defense level and the level required by their home States, those who passed at the DOD level only, those who participated but failed, and those who did not participate. The questionnaire returns indicated that: servicemen took the GED before, during, or after their first duty assignment; they did not perceive any encouragement to take the test; those who were self-motivated to participate in the program did better than those whose unit participated as a group; there are four common sources of GED information; and about 48 percent of the responding participants took a preparatory course. In spite of being notified of their successful participation, there was considerable confusion as to the serviceman's knowledge of his success. Most non-participants gave personal reasons as the basis for their non-participation.

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MANPOWER DEVELOPMENT RESEARCH PROGRAM

Analysis of Survey Findings Concerning the USAFI High School GED Program

Manpower Development Division
Air Force Human Research Laboratory

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Supersedes DD Form 1475, dtd 1 Nov 1965

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER O.SD/M&RA MR 73-2 AFHRL TR 73-64	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) ANALYSIS OF SURVEY FINDINGS CONCERNING THE USAFI HIGH SCHOOL GED PROGRAM		5. TYPE OF REPORT & PERIOD COVERED Memorandum
7. AUTHOR(s) Beusse, William B.		6. PERFORMING ORG. REPORT NUMBER AFHRL TR 73-64
9. PERFORMING ORGANIZATION NAME AND ADDRESS Air Force Human Resources Laboratory Manpower Development Division Alexandria, Virginia 22314		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs) Directorate of Manpower Research Washington, D.C. 20301		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS PE 62703F Project 4499-06-42
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE
		13. NUMBER OF PAGES 33
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for Public Release; Distribution Unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Previously submitted for publication as AFHRL/MD TRM-28		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) GED Program Educational Programs High School Equivalency General Educational Development USAFI Programs		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This Study provides information concerning the training of GED participation and its effect upon GED attainment, the degree of encouragement received and initiative demonstrated by the serviceman, where and how the serviceman heard about the GED program, participation in preparatory courses and their effect upon GED attainment, the knowledge the serviceman has about his success, conversion of GED test results into official state issued high school equivalency certificates and the reasons why individuals do not participate in the program.		

ANALYSIS OF SURVEY FINDINGS
CONCERNING THE USAFI HIGH
SCHOOL GED PROGRAM

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This study was conducted in cooperation with the
Directorate of Education Programs and Management
Training, OASD (M&RA).

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Section I

SUMMARY

The purpose of this study was to provide information on several questions which are of interest to GED program managers. Information was sought concerning the timing of GED participation and its effect upon GED attainment, the degree of encouragement received and initiative demonstrated by the serviceman, where and how the serviceman heard about the GED program, participation in preparatory courses and their effect upon GED attainment, the knowledge the serviceman has about his success, conversion of GED test results into official state issued high school equivalency certificates, and the reasons why individuals do not participate in the program.

The data for this study were gathered by means of a questionnaire mailed to a sample of recent Army separatenes. The sample comprised four groups; those who passed the GED tests at both the DOD level and the level required by their state, those who passed at only the DOD level, those who participated in the program but failed, and those who did not participate.

The major findings of the study are presented in this section and discussed in some detail in later sections of the report.

It was found that approximately equal percentages of servicemen took the GED tests within each of three time intervals; before, during, and after their first duty assignment. Servicemen who took the tests early in their military tours were not as likely to pass as those who took them

later. However, it was also found that the earlier a serviceman takes the GED tests, the higher his pay grade at separation.

Most of the respondents reported that they did not perceive any encouragement to take the tests. Non-participants reported the least encouragement. Almost four-fifths of the respondents indicated that their participation was due to their own initiative. A higher percentage of those individuals who took the GED as part of an organized base or unit-wide program failed compared with those who took the tests at their own initiative. Generally, the higher a serviceman's motivation to take the tests, the better he performed on them.

Servicemen in each of the four sample groups learned about the GED program from similar sources. Approximately 9% of the non-participants reported they "never heard of" the GED tests.

About 48% of the participants who responded took some kind of preparatory course. The higher a serviceman's aptitude and educational level, the less likely he was to take a course. The time which has elapsed between quitting school and taking the GED tests seems to be an important determinant of preparatory course participation. The results indicate the existence of an interaction effect between aptitude and course participation upon success. Taking preparatory courses seemed to aid low ability personnel (AFQT Category IV's) in passing the tests while such courses had little or no effect upon higher ability personnel.

Although approximately three quarters of the successful participants were informed of their success either by receipt of a USAFI Certificate

or by being told they have qualified for a state certificate, a considerable amount of confusion as to the serviceman's knowledge of his success still seemed to exist.

It was found that 59% of the STATE group and 36% of the DOD group applied for state issued certificates. Knowledge of an individual's success and receipt of encouragement to get state certification were found to be important determinants of the decision to apply for a state certificate.

The respondents reported that personal reasons, such as doubt about ability to pass the tests, were the most important reasons for non-participation. Approximately 17% of the non-participants gave lack of information as the reason they did not participate.

Section II

INTRODUCTION

PURPOSE

This is the third report of a series of studies concerning the functioning of the United States Armed Forces Institute (USAFI) High School General Educational Development (GED) program. The purpose of this study is to provide information on several questions which are of interest to the GED program managers in their continuing efforts to improve the effectiveness of the program. Information was sought concerning:

- a. the timing of GED participation and its effect upon the serviceman's success in achieving a GED certificate,
- b. the degree of encouragement received and initiative demonstrated by the serviceman,
- c. where and how the serviceman heard about the GED program,
- d. participation in preparatory courses and its effect upon the serviceman's success in achieving a GED certificate,
- e. how well informed the serviceman is concerning his GED test results,
- f. conversion of GED test results into official state issued high school equivalency certificates, and
- g. the reasons why individuals do not participate in the program.

APPROACH

The objective of the USAFI GED program can be broadly stated as providing the opportunity for all non-high school graduate servicemen to

Section III

TIMING OF GED TEST PARTICIPATION

One question of interest deals with the timing of GED program participation. That is, at what point in their military career do servicemen take the GED tests and does this timing have an effect upon their success.

It was found that very few men took the GED tests before basic training or during advanced training. Approximately equal percentages of servicemen took the GED tests within each of three time spans; before, during, and after their first duty assignment. Table 2 presents the percentage of men in each group who took the GED during each of the three time intervals.

Table 2

TIMING OF TESTS

Point When GED Tests Were Taken	Percent of Respondents		
	STATE	DOD	FAILS
Before 1st Duty Assignment	33%	34%	41%
During 1st Duty Assignment	35	34	27
After 1st Duty Assignment	32	32	32

Table 2 indicates that the FAILS group tended to take the GED tests earlier in their military careers than either the STATE or DOD groups. Although causation cannot be reliably determined, it appears that taking the tests too early in his military career may decrease the probability that a man will pass the GED. There are several reasons why this might be true. First, during basic training the serviceman is presented with a new environment. The pressures and anxieties faced by recruits may hinder them from giving their best performance on the tests. Also, since

time is a precious commodity during basic training, the recruit may be unable or unwilling to devote spare time to preparation and study for the tests.

It can be hypothesized that the earlier a serviceman participates in the GED, the more he should benefit from successful performance on the tests. As Table 3 shows, the earlier a man takes the GED tests, the higher his pay grade at separation.

Table 3
TIMING OF GED PARTICIPATION
AND PAY GRADE AT SEPARATION

Pay Grade at Separation	Percent of Respondents Point When GED Tests Were Taken		
	Before 1st Duty Assignment	During 1st Duty Assignment	After 1st Duty Assignment
E1 to E3	9%	10%	12%
E4	50	55	56
E5 or above	41	35	32

Therefore, although there may be drawbacks in pushing servicemen into taking the GED tests early in their military careers, this result suggests that there may be beneficial aspects to early participation. Also, it has been found that even those individuals who fail the GED tests seem to receive some benefits. Beusse (1973) found that veterans who failed the tests showed the highest percentage of respondents planning to continue their education. Therefore, failure does not necessarily mean an end to educational efforts.

Section IV

ENCOURAGEMENT AND INITIATIVE

Since it is the policy of the Department of Defense to encourage servicemen to advance their education, another question of interest concerns the amount of encouragement which servicemen perceive. Table 4 shows the percentage of servicemen in each group who felt they were encouraged to take the GED.

Table 4

PERCEPTION OF ENCOURAGEMENT

Group	Percent Perceiving Encouragement
STATE	33%
DOD	38
FAILS	35
NPART	22

Most of the non-high school graduates in each group did not perceive encouragement to take the GED tests. Non-participants perceived the least encouragement.

Encouragement was also examined in relation to other variables and it was found to be unrelated to AFQT, highest year of education completed, source of accession and pay grade at separation. A slightly higher percentage of Negroes perceived encouragement than did Caucasians, 37% compared to 32%.

The motivation of servicemen is an issue of major concern. Presumably, a highly motivated individual will do better than one who is not highly motivated. Although the questionnaire instrument did not include any items

which directly measure motivation, there were several questions from which inferences can be drawn. The servicemen were asked whether they took the GED tests as part of an organized program or at their own request. A man who takes the tests at his own initiative may be assumed to be more highly motivated than one who has been recruited into a base-wide program. Also, a highly motivated individual is likely to make more visits to the education office than an individual who is not highly motivated. The positive relationship ($\gamma = .34$ $p < .01$) between the number of visits to the education office and taking the tests at the individual's own initiative provides additional justification for the use of these questions as proxy variables in making inferences about motivation. The distribution of initiative across groups is shown in Table 5.

Table 5

AT WHOSE INITIATIVE WERE TESTS TAKEN

	Percent of Servicemen			
	Total	STATE	DOD	FAILS
Took the GED as part of an organized program	22%	21%	20%	28%
Took the GED at own request	78	79	80	72

Almost four-fifths of the respondents indicated that their participation was due to their own initiative. The vast majority of all groups state they took the GED at their own request. Apparently organized base or unit programs do not account for more than about one quarter of the participants. Participation in base-wide or unit-wide programs seems to occur in the early stages of a serviceman's career. Seventy-three percent of the men who participated in these programs took the tests before their first duty assignment compared to only 25% of those who took the GED at their own initiative.

Approximately 36% of those individuals who took the GED as part of an organized program failed compared to only 27% of those who took the tests at their own request. Perhaps unwilling or unprepared servicemen are being pushed into taking the test too soon.

Another indicator of positive motivation could be the number of times the serviceman visits the base education office. The assumption is that a serviceman who has a strong desire to increase his education will manifest his desire by visiting the education office more frequently than a serviceman without strong motivation. Table 6 presents the distribution of reported education office visits for each group.

Table 6

EDUCATION OFFICE VISITS

Number of Visits	Percent of Servicemen			
	STATE	DOD	FAILS	NPART
0 or 1	23%	27%	39%	73%
2 to 5	51	53	48	20
6 or more	26	20	13	7

The more often a serviceman visited the education office, the better he tended to do on the tests. About 73% of the non-participants state that they had never gone to the education office or had gone only once.

Since education office visits may not necessarily indicate high educational motivation, a number of alternative interpretations were tested. The above relationship could be the result of preparatory classes and/or testing centers being physically located at the education office. Although servicemen who take courses make more visits, it is unlikely that the results are due to location of preparatory courses since differences in the

distribution of visits between servicemen who took preparatory courses and those who did not are small. Also, it is unlikely that the relationship was due to location of testing centers because each member of the STATE and DOD groups and most of the FAILS group took five tests. Thus, the percentage having visited the education office six or more times would have been much higher.

Section V

SOURCE OF GED INFORMATION

The media through which servicemen learn about the GED is also of interest to the program managers. The distribution of information sources for each group is given in Table 7.

Table 7

SOURCES OF GED INFORMATION

	Percent of Servicemen			
	STATE	DOD	FAILS	NPART
Company announcement	28%	32%	35%	22%
A friend	23	19	21	24
Educational talk at in-processing	14	16	13	15
Bulletin Board	9	10	11	10
Base education officer	10	9	8	6
High School	3	3	3	4
Unit CI conference	2	2	3	2
Other	11	9	6	8
Never heard of them	0	0	0	9

Although the four groups differed somewhat on the extent to which various media reached them, the ranking of sources was similar. Approximately 9% of the non-participants claimed they "never heard of" the GED tests.

Section VI

PREPARATORY COURSES

Although they are not a prerequisite for taking the GED tests, a number of different kinds of preparatory courses are available to the serviceman. However, not every base offers each type of course. The four main types of courses which a serviceman is likely to take in order to prepare for the GED examinations are Army Preparatory Training (APT), group study courses, guided self-study and courses given by civilian high schools.

The Army Preparatory Training (APT) program was established by USCONARC Regulation 350-1 dated September 9, 1970. The APT consists of basic education in reading, arithmetic and social studies, supplemented with introductory military training. Although its main emphasis is on improving literacy skills rather than preparation for the GED exams, it has been included in this study because of the likelihood that a substantial number of low ability servicemen have participated in the program.

Group study courses are taught at base level in an organized class by a locally employed instructor. Course materials are supplied by USAFI through the local education center. Satisfactory completion is recorded on USAFI records only if the student either passes the appropriate course achievement test or takes the GED. There is no cost to the student.

Guided self-study is a correspondence program offered directly from USAFI. Materials and lesson service are provided by USAFI, although submission of lessons is not mandatory. Successful completion involves passing the course achievement test within 12 months from the date of enrollment. The cost to the student is either \$10 or one USAFI Free

Enrollment Certificate (which is awarded for each satisfactorily completed course).

In addition, many bases have made arrangements for military personnel to attend high school equivalency classes given by civilian schools. The cost of this type of program is normally borne by the local education office.

The courses which an individual might take is a function of availability at his duty station, his subjective evaluations of the program and his need for assistance. It should also be noted that the courses differ in the investment (of both money and time) which the individual must make.

Overall, it was found that 48% of the participants who responded took some kind of preparatory course. Table 8 gives the distribution of courses taken by each of the participant groups.

Table 8

PREPARATORY CLASSES TAKEN BY GED PARTICIPANTS

	Percent of Servicemen		
	STATE	DOD	FAILS
Army Preparatory Training	4%	7%	6%
High School Courses Run By Civilian High Schools	6	9	15
Guided Self-Study	3	4	4
Group Study Courses	11	18	17
Other	4	3	3
More than one of the Above	5	8	10
Didn't Take Any Courses	67	51	45

A much larger percentage of the STATE group took no courses compared to each of the other two groups. This result was probably influenced by aptitude and educational level. An individual with high aptitude and/or a high educational level may realistically perceive that he does not need preparatory classes. Table 9 shows the percentage of servicemen in each aptitude and educational category who have taken preparatory classes.

Table 9

RELATIONSHIP OF APTITUDE AND EDUCATIONAL LEVEL TO
PARTICIPATION IN PREPARATORY COURSES

Aptitude (AFQT Categories)	Percent of Servicemen Taking Preparatory Courses
I	33%
II	40
III	49
IV	68
Educational Level	
11th Grade	38
10th Grade	51
9th Grade	55

As expected, these results indicate that the higher a man's aptitude (as measured by AFQT) the less likely he was to take a course to prepare for the GED tests. Also, the more years of formal education a man had, the less likely he was to take a course. The higher percentage of lower ability personnel who take some kind of course prior to taking the GED tests has undoubtedly been affected by the fact that many of these servicemen are automatically programmed into the literacy training program. However, even when those who reported taking APT are omitted from the analysis, the negative relationship between aptitude and educational level to participation in preparatory courses still exists.

Several other variables were tested for a relationship to taking preparatory courses. It was found that 61% of the Negro respondents took some kind of preparatory class compared to only 46% of the Caucasians. The apparent relationship between race and course participation may be a spurious one caused by differences in the distribution of AFQT scores. This possibility is explored in Table 10.

Table 10

RELATIONSHIP BETWEEN RACE AND PREPARATORY COURSE
PARTICIPATION CONTROLLING FOR APTITUDE AND EDUCATION

Aptitude (AFQT Category)	Percent of GED Participants Who Take A Preparatory Course	
	Caucasian	Negro
I + II	37%	47%
III	48	59
IV	68	67
Education		
11th Grade	34	61
10th Grade	49	62
9th Grade	54	60

As Table 10 indicates, a higher percentage of Negroes took preparatory courses than Caucasians at each aptitude and educational level. Therefore, the differences between Caucasians and Negroes are not due solely to differences in AFQT scores. The above table also indicates that the propensity of Negroes to take preparatory courses is unaffected by educational level.

The serviceman's age at entry was also found to be related to taking courses. As Table 11 indicates, the older a serviceman was at time of entry into active duty, the more likely he was to take a course to prepare for the GED tests. However, when aptitude is controlled, differences among age groups are insignificant. The table also shows that older servicemen with 10th and 11th grade educations were more likely to take courses than younger servicemen. Thus, it seems that the time which has elapsed between quitting school and entering the military is an important determinant of preparatory course participation.

Table 11

RELATIONSHIP OF AGE AT ENTRY TO TAKING
PREPARATORY CLASSES

	Percent Taking Preparatory Courses Age at Entry		
	19 or younger	20 or 21	22 or older
Total NHSG Participants	44%	47%	59%
Aptitude (AFQT Categories)			
I + II	36	37	40
III	44	49	60
IV	71	64	72
Educational Level			
11th Grade	28	41	47
10th Grade	49	50	60
9th Grade or Below	53	52	66

In addition, it was found that men who served in Vietnam were less likely to have taken courses than non-Vietnam veterans. Forty-three percent of the Vietnam veterans took preparatory courses compared to 54% of the non-Vietnam veterans. The lack of availability of preparatory courses in Vietnam is probably the major cause of this finding.

Source of accession into the service, marital status, and number of dependents were found to be unrelated to taking preparatory courses.

Differences in motivation also may account for whether or not courses are taken. The evidence resulting from use of the two proxy motivational variables (source of initiative to take the GED and number of visits to the education office) indicates that there is a positive relationship between motivation and taking courses. Fifty-one percent of those servicemen who took the GED tests at their own request took courses compared to only 38% of those who took the GED as part of a special program. This would indicate

that where specially organized base or unit-wide programs exist, they are pretty much limited to testing only.

Also, as was previously noted, there is a slight tendency for individuals who took courses to make more visits to the education office.

The source of initiative to take the GED also makes a difference as to which courses will be taken. Table 12 shows the distribution of courses taken for servicemen who took the GED tests as part of a special program and those who took them at their own request.

Table 12

RELATIONSHIP BETWEEN PREPARATORY COURSE PARTICIPATION
AND SOURCE OF INITIATIVE TO TAKE THE GED

	Percent of Course Participants	
	Took the GED as Part of a Special Program	Took the GED at Their Own Request
Army Preparatory Training	27%	15%
High School courses given in Civilian Schools	37	26
Guided Self-Study	5	11
Group Study	31	48

Those servicemen who took the GED at their own request show a much higher propensity to take self-study courses. Since the self-study courses require a higher investment of money and effort, these results are additional justification for use of source of initiative as a proxy variable to make inferences about motivation.

An important question involves the effect of preparatory courses upon achievement on the GED tests. At first glance, there seems to be a negative

relationship between taking preparatory courses and passing the GED examinations. Thirty-three percent of the respondents who took courses failed the examinations compared to only 24% of those who didn't take any courses. Since previous research (Fites and Beusse, 1972) has shown a strong relationship between aptitude and achievement of success on the GED, and this study has noted a connection between aptitude and course participation, the relationship between course participation and success was recomputed controlling for differences in aptitude.

Table 13

RELATIONSHIP BETWEEN PREPARATORY COURSE
PARTICIPATION AND SUCCESS OF THE GED CONTROLLING
FOR APTITUDE

Aptitude (AFQT Category)	Percent of Servicemen Who Passed the GED	
	Took a Preparatory Course	Took No Course
I and II	88%	94%
III	68	71
IV	52	42

The results shown in Table 13 indicate the existence of an interaction effect between aptitude and course participation. Taking preparatory courses seemed to aid low ability personnel (AFQT Category IV's) in passing the tests, while such courses had little or no effect upon higher ability personnel.

The most probable reason for this finding lies in the nature of the knowledge which the GED exams are designed to test. The theory behind the GED program is that it should be possible to measure the knowledge which adults have acquired informally through their daily lives. Consequently, the tests emphasize general knowledge and logic more than actual knowledge of facts. Therefore, it is not surprising that preparatory classes do not appear to aid higher ability personnel since their logic skills and general

knowledge were probably already fairly well developed.

Since taking a course has been shown to have some effect, at least on low aptitude personnel, it would be informative to determine which courses achieve the best results. Table 14 presents the percentage of participants in each type of course who failed the GED tests.

Table 14

FAIL RATES OF PREPARATORY COURSES

	Percent of Course Participants Who Fail GED
Army Preparatory Training	27%
High School Courses Given by Civilian Schools	46
Guided self-study	28
Group study	29

The above table indicates that almost half of those servicemen who took high school courses offered by civilian schools failed the GED tests. Again, since taking a course is a self-selection process, these results may have been affected by differing aptitude and educational levels.

Table 15

GED FAIL RATES BY PREPARATORY COURSES CONTROLLING FOR
APTITUDE AND EDUCATIONAL LEVEL

	Army Preparatory Training	High School Courses Taught in Civilian Schools	Guided Self Study	Group Study
Aptitude (AFQT Categories)				
I + II	12%	38%	18%	13%
III	33	43	28	32
IV	39	65	33	45
Educational Level				
11th Grade	38	47	16	45
10th Grade	27	30	30	22
9th Grade or below	23	54	39	35

Even when aptitude and education are controlled, participants in the high school courses taught in civilian schools had the highest rate of

failure on the GED. Further study should be made to determine the reasons for this high rate. Possible causes range from inadequate programs to possible difficulties in maintaining regular attendance and study during off-duty hours. It should be noted that a confounding variable which this study was unable to measure is whether or not the serviceman completed the course.

Section VII

KNOWLEDGE OF RESULTS

Another question of interest involves the serviceman's knowledge of his test results. Respondents who participated in the program were asked; "did you pass the GED tests for Army purposes?" The distribution of answers is shown in Table 16.

Table 16

KNOWLEDGE OF RESULTS

	Percent of Servicemen		
	STATE	DOD	FAILS
"Did you pass the GED tests for Army purposes"?			
Yes	46%	50%	10%
No	46	40	50
Don't Know	8	10	40

Apparently there is a great deal of confusion as to their success. All of the STATE and DOD groups passed the exams by the Department of Defense standards and therefore should have answered "yes". However, less than half of the respondents stated that they passed "for Army purposes." There are several possible explanations for this. One possibility is that the individual may have meant that he took and passed the GED for his "own purposes" rather than "Army purposes."

A second possibility is that successful participants are not being notified. Several other questions were asked which shed some light on this proposition. Approximately 75% of both successful groups (STATE and DOD) indicated that they received USAFI Certificates. This finding

replicates results of a previous study (Beusse, 1972b). Also, 74% of the STATE group reported that they were told they passed the requirements of their state.

Of the servicemen who received USAFI Certificates, only 51% stated that they passed "for Army purposes". Thus, receipt of the USAFI Certificate does not appear to indicate to the recipients that they passed the tests. Also, only half of those members of the STATE group who were told they passed their state's requirements believe that they passed the tests.

Thus, although a large majority of the successful servicemen were informed of their success, either by receipt of a USAFI Certificate or by being told they had qualified for a state certificate, a considerable amount of confusion still existed. This gives rise to the third possible explanation involving the meaning the respondents may be ascribing to the phrase, "for Army purposes." The respondents may have interpreted the question to mean whether or not the Army utilized the information that they had achieved high school equivalency. Support for this explanation can be derived from the finding that only about half of the STATE and DOD groups believed that their military records were updated to show they had high school equivalency certificates. Also, only about 65% of those who passed the tests stated that the educational level listed on their discharge form (DD214) was 12th grade or GED. Although it is doubtful that the respondents actually referred to their DD214 in answering that question, the important point is that a considerable proportion of the successful GED participants do not believe that their success was officially recorded.

It should be emphasized that the answers to the questions referring to an individual's records are his subjective perceptions. The data files from which the samples were drawn have GED recorded as the educational level of the STATE and DOD groups. Thus it may be that the individual's responses were guided by his perception that the Army did not utilize his newly acquired high school equivalency status.

Section VIII

ACQUISITION OF STATE ISSUED CERTIFICATES OR DIPLOMAS

Each state has established its own requirements for conversion of GED certificates obtained during military service into official certificates or diplomas issued by state or local agencies (CASE, 1972). Since the GED program's potential value is enhanced by acquisition of an official state certificate, the servicemen's success in acquiring state certification is important. It was found that 59% of the STATE group and 36% of the DOD group applied for state certificates, which replicates previous research (Beusse, 1972b).

Men who had passed the GED tests at the level prescribed by their home state were asked if they had been told that they qualified for a state certificate. Approximately one-quarter reported they were not told. This finding is also compatible with previous research (Beusse, 1972b) which indicated that about one-quarter of the successful GED participants were not aware that their state issued high school equivalency diplomas.

Knowledge of their success has important ramifications. Over two-thirds of those servicemen who were told they passed at the level required by their state applied for a state certificate compared to only about one-third of those who were not told. Also, it was found that actual possession of a USAFI Certificate increased the likelihood that an individual would apply for state certification.

Encouragement may also be a factor in determining whether or not the serviceman attempts to acquire a state issued certificate. About 80% of the respondents who were told they passed their state requirements

reported that the education officer encouraged them to apply for state certification. Sixty-seven percent of those servicemen who indicated they were encouraged by the education officer applied for state certification compared to only 49% of those who indicated they didn't receive encouragement.

Section IX

REASONS FOR NON-PARTICIPATION

An important research question involves identification of reasons for non-participation. A previous study (Fites and Beusse, 1972) found many differences between those non-high school graduates who participated in the GED program and those who did not. In comparing GED program participants with non-participants, it was found that non-participants were less likely to have enlisted, had lower AFQT scores, had fewer years of formal education, were older, were more likely to have served in Vietnam, were less likely to be married, did not achieve as high pay grades. However, identification of background characteristics associated with non-participation does not give us sufficient understanding of the underlying causes of non-participation. Additional information is needed to determine why certain background variables distinguish between participants and non-participants.

The questionnaire which was sent to the non-participant sample contained an item which asked the respondent for the reason he did not take the GED tests while he was in the service. Five structured alternatives were provided along with an "other, explain" category. Analysis of the open-ended responses produced five additional categories. The distribution of responses appears in Table 17.

For purposes of analysis, the reasons were grouped into three categories; informational reasons, structural reasons, and personal reasons. Informational reasons included lack of knowledge of the availability of

the program or finding out too late. Structural reasons refer to characteristics of the military environment which may have prevented or discouraged an individual from participating. Attitudes of servicemen which discourage them from participating are considered personal reasons.

Table 17

REASONS STATED FOR NON-PARTICIPATION

	Percent of Non-Participants	
"Why didn't you take the GED tests?"		
Informational Reasons:	17%	
I didn't know about them*		14%
I found out too late		3
Structural Reasons:	30	
They were not available where I was stationed*		10
My orders or duties wouldn't permit		10
I didn't have the time		8
My CO or NCO discouraged me		2
Personal Reasons:	42	
I didn't need a high school diploma*		9
I don't like tests*		4
I didn't think I could pass them*		27
The GED doesn't do any good		2
Other: Unspecified	11	11

*Structured alternatives provided on the questionnaire

As can be seen, personal reasons were responsible for most of the respondents' decisions not to participate. Doubt about ability to pass was by far the most important single reason. Structural causes such as lack of availability at certain duty stations, orders or duties which wouldn't permit, and lack of time accounted for about 30% of the reasons for non-participation. Approximately 17% of the non-participants gave informational reasons.

Distributions of reasons for non-participation were computed on each of the variables which had been identified as related to non-participation. While many similarities among various population subgroups existed, many differences were also found. However, due to the low numbers which appear in many cells when the data are distributed across eleven categories, only a cursory analysis of the individual reasons is presented.

Enlistees were more likely than inductees to state tests "were not available" or "orders or duties which wouldn't permit" as major reasons for non-participation. Inductees, on the other hand, were much more likely to specify that they "didn't know about them." Thus, it appears that enlistees are better informed than inductees. This may be a result of recruiters using the GED program as an incentive.

Servicemen of different aptitudes also tended to give different reasons. Low aptitude personnel (AFQT Category IV) gave "didn't think I could pass them" far more often than higher aptitude personnel.

The fewer years of formal education a serviceman had, the more likely he was to report doubt about passing as his reason for not having taken the GED.

Older servicemen were more apt to list lack of awareness of the program or doubt about their ability to pass as the reasons they did not participate while younger men reported that they "don't like tests" or "don't need a high school diploma," more often than married men.

Personnel who separated at the lower pay grades reported more often that they "didn't need a high school diploma" than servicemen who attained higher pay grades.

In a study of benefits resulting from GED participation, it was noted that a substantial number of non-participants enroll in some type of high school educational program after separation (Beusse, 1972a). An even larger number state that they plan to continue their formal education. These findings raise the question of why these veterans did not take advantage of the GED program while they were in the service. Table 18 gives the distribution of reasons for non-participation for veterans who plan to continue their formal education and those who don't.

Table 18

REASONS FOR NON-PARTICIPATION*

	Percent of Respondents Specifying A Reason	
	Veterans Who Plan to Continue Education	Veterans Who Don't Plan to Continue Education
"Why didn't you take the GED tests?"		
Informational Reasons:	18%	12%
I didn't know about them	15%	11%
I found out too late	3	1
Structural Reasons:	38	23
They were not available where		
I was stationed	9	6
My orders would not permit	15	4
I didn't have the time	11	13
My CO or NCO discouraged me	3	0
Personal Reasons:	44	65
I didn't need a high school diploma	7	20
I don't like tests	3	14
I didn't think I could pass	28	31
The GED doesn't do any good	6	0

*Computation of percentages includes only those respondents who specified a reason for non-participation, i.e., those who checked "other" but did not elaborate have been excluded.

As Table 18 indicates, veterans who plan to continue their formal education were more likely to report that they were uninformed as to the existence of the program than those who do not plan to continue. Veterans with higher educational aspirations were also more likely to give structural reasons for their non-participation. Also, those former servicemen who plan to continue their education were less likely to have had personal attitudes which discouraged their participation. The only exception to this trend is the higher percentage of veterans with plans for continued education who did not participate because they felt the "GED doesn't do any good." The implications of these findings is that participation in the GED program can be increased if GED information dissemination can be improved and structural barriers to participation can be reduced.

Reasons for non-participation are an important area of inquiry. The results of this analysis indicate that they merit more in-depth study to determine what can be done to eliminate impediments to participation.

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14.	KEY WORDS	LINK A		LINK B		LINK C	
		ROLE	WT	ROLE	WT	ROLE	WT
	GED Program Educational Programs High School Equivalency General Educational Development USAFI Programs						

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Air Force Human Resources Laboratory Manpower Development Division Alexandria, Virginia 22314		2a. REPORT SECURITY CLASSIFICATION Unclassified	
3. REPORT TITLE Analysis of Survey Findings Concerning the USAFI High School GED Program		2b. GROUP	
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
5. AUTHOR(S) (First name, middle initial, last name) William E. Beusse			
6. REPORT DATE December 1972		7a. TOTAL NO. OF PAGES 33	7b. NO. OF REFS 4
8a. CONTRACT OR GRANT NO.		9a. ORIGINATOR'S REPORT NUMBER(S) AFHRL/MD TRM-28	
b. PROJECT NO. 4499		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report) OASD/M&RA MR 73-2	
c. Task No. 449906			
d. Work Unit No. 44990642			
10. DISTRIBUTION STATEMENT Approved for public release; distribution unlimited			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY Office of Assistant Secretary of Defense Manpower and Reserve Affairs Directorate for Manpower Research	
13. ABSTRACT <p>This study provides information concerning the training of GED participation and its effect upon GED attainment, the degree of encouragement received and initiative demonstrated by the serviceman, where and how the serviceman heard about the GED program, participation in preparatory courses and their effect upon GED attainment, the knowledge the serviceman has about his success, conversion of GED test results into official state issued high school equivalency certificates, and the reasons why individuals do not participate in the program.</p>			