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## ABSTRACT

The Armed Services Vocational Aptitude Battery (ASVAB) Career Exploration Program is a cooperative effort between the U.S. Department of Defense and U.S. schools that provides materials, services, and information for students and guidance staff to aid student career exploration in both the civilian and the military worlds of work. It gives military recruiters access to schools and opportunities to contact students who are interested in joining the military. More than 800,000 students in 13,000 schools throughout the United States participate in the ASVAB Career Exploration Program. A national study was conducted to assess the program's effectiveness and its impact on students. Assessment forms were completed by a sample of students who participated in the ASVAB program currently and in the preceding school year, students who did not participate in the program, and guidance staff at schools that did and did not participate in the program. A total of 1,096 students at 48 high schools and 408 guidance staff at 352 high schools each completed at least 1 questionnaire. In addition, site visits were made to 6 schools that offered the ASVAB program, and 12 focus groups attended by a total of 94 students were conducted there. Analysis of the data showed that participation in the ASVAB Career Exploration Program is associated with statistically significant and positive impacts on students. Their career maturity increased, they engaged in more career exploration behaviors, and their career exploration knowledge was enhanced. These effects were persistent, lasting for at least 1 year. The program worked equally well for males and females and for whites and minorities. Participation in the program also helped to enhance military recruiting goals. These positive effects were not detected in students who not participate in the program. (KC)

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American Association For Career Education

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### AACE Bonus Brief

## **ASVAB Career Exploration Program: Impact on Student Career Development**

**Janet E. Wall**

The *Armed Services Vocational Aptitude Battery (ASVAB) Career Exploration Program* is a cooperative effort between the Department of Defense (DoD) and the nation's schools. The objectives of this program are as follows:

1. Provide materials, services, and information to students and guidance staff that will aid in student career exploration in both the civilian and military worlds-of-work.
2. Provide military recruiters access to schools and opportunities to contact students who are interested in serving their country by joining the military.

The *ASVAB Career Exploration Program* is widely used: In 1993-94, 870,390 students in 10th-12th grade participated in the program; in 1994-95, that number was 875,255. Approximately 13,000 schools participate in the program annually.

Students participating in the program complete an aptitude test battery (*ASVAB*), an interest inventory, and a work values exercise. Through the use of these and other program materials, students learn about themselves and use this information to identify different career options.

In order to assess the *ASVAB Career Exploration Program's* effectiveness and its impact on students, a national study was conducted from January--June 1995.

### **Methodology**

A quasi-experimental design was used:

1. Students participating in the *ASVAB Career Exploration Program* in 1995 completed program assessment instruments before and after program participation. These assessments included the *Career Decision Scale*, a commercially published instrument measuring career maturity (Psychological Assessment Resources, Inc.).
2. Students who did not participate in the *ASVAB* program completed, at comparable times, assessments containing the *Career Decision Scale* and other items identical to those answered by participating students.
3. Students who participated in the program in the preceding school year also completed questionnaires, including the *Career Decision Scale*, to allow assessment of the permanence of program effects.
4. Guidance staff at schools that offered the *ASVAB* program completed questionnaires about the program and its impact on students.
5. Guidance staff at other schools completed questionnaires about their schools' career exploration programs.

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### **Sampling and Sample Representativeness**

Schools in which student data were collected were selected from sampling frames consisting of (a) schools that offered the *ASVAB* program between January and June 1995, and (b) schools that did not offer the program during the 1994-95 school year. Random, stratified sampling was used for the selection of schools, with probabilities of selection proportional to a school's 10th-12th grade enrollments. Students were then selected randomly from lists prepared for this study. Results from the student surveys are generalizable to the universe of American high schools that offer the *ASVAB Career Exploration Program*.

Random, stratified sampling was also employed for the selection of guidance staff survey respondents. Results from the guidance staff surveys are generalizable to the universe of American high schools that do and do not offer the *ASVAB* program.

### **Data Collection**

At 48 high schools, 1,096 students completed up to three surveys each. In addition, 408 guidance staff at 352 high schools each completed at least one questionnaire. The overall survey response rate for students was 86%; for guidance staff, 80%.

In addition, site visits were made to six schools that offered the *ASVAB* program. During these visits, 12 focus groups, attended by a total of 94 students, were conducted to further inform about the program and its impact. Key decision makers and guidance staff were also personally interviewed during these visits. Finally, guidance staff at schools that participated in the study were interviewed by telephone to find out more about the career exploration programs at their schools.

### **Data Analysis**

The *ASVAB Career Exploration Program* can influence students in a variety of ways. Its impact was assessed with respect to students' career maturity (career indecision and career certainty), career exploration behaviors, career exploration knowledge, and military career knowledge and recruiting impacts.

Both participating and nonparticipating students completed questionnaires asking about these factors. The questionnaires contained many identical items, enabling measurement of within-student changes and comparisons between participating and nonparticipating students.

Multivariate analyses were employed to control for student demographic characteristics (grade, gender, race/ethnicity, and the type of educational program in which a student was enrolled), as well as to determine whether the program was equally effective for different kinds of students.

Data were also analyzed to determine if there was evidence of adverse impact, as a function of either gender or race/ethnicity.

Finally, subjective assessments of the program and its impact, by both students and guidance staff, were compared.

### **Career Maturity**

The *Career Decision Scale*, selected for administration to participating students to provide an independent assessment of students' levels of maturity with respect to their

career decision making, provided measures of two different but related factors: career indecision and career certainty.

Initially, students who participated in the *ASVAB Career Exploration Program* were more unsure about their future careers than students who did not participate in the program. They had higher career indecision scores and lower career certainty scores.

After participation in the program, these students significantly, both from a statistical and a programmatic perspective, reduced their career indecision and increased their career certainty.

These improvements were significantly greater than the changes exhibited by nonparticipating students, both at their own schools and at schools that did not offer the program. At schools that did not offer the *ASVAB* program, students' career indecision, as measured by the *Career Decision Scale*, increased (i.e., worsened).

The improvements for *ASVAB* program users were confirmed by more conservative analyses which treated the school as the unit of analysis, and by multivariate analyses which allowed control for differences in student demographic characteristics and for differences in their initial career indecision and career certainty scores. Regardless of gender, race/ethnicity, academic program, or grade, students benefited from program participation. Comparisons with students who participated in the program in the previous school year showed that these improvements lasted for at least one year.

#### **Career Exploration Knowledge**

After participation in the *ASVAB Career Exploration Program*, students felt their career exploration knowledge increased in all of the areas investigated. Their agreement with each of the following statements increased significantly.

- o I know what kind of career I want to pursue after I leave high school.
- o I have a good idea of my abilities and skills.
- o I have a good idea of the kinds of jobs I would be good at.
- o I know what is required to succeed in different careers.
- o I know how to find out about what types of jobs are best for me.
- o I know about different careers available in the military.

Nonparticipating students did not show these increases.

Participating students' increases were confirmed by analyses treating the school, rather than the student, as the unit of analysis. Multivariate analyses confirmed that these improvements (with the single exception of knowing what career they wanted to pursue) occurred for students regardless of their race/ethnicity, gender, grade, or academic program.

More impressively, these increases were persistent, lasting for at least one year. In fact, the career exploration skills that were acquired as a result of participation enabled students to continue learning about careers. Career knowledge gains increased over time.

#### **Career Exploration Behavior**

Students who participated in the *ASVAB Career Exploration Program* increased the number of different career exploration behaviors in which they engaged. The

proportions of students who talked with school counselors, talked with military recruiters, and went to their career center, increased significantly after participation. Nonparticipating students did not show these increases.

These improvements were confirmed by analyses which treated the school as the unit of analyses; multivariate analyses indicated that these improvements occurred for all types of students, regardless of their race/ethnicity, gender, grade, or academic program; and the improvements were also long-lived. A year after participating in the ASVAB program, students continued to engage in career exploration behaviors at levels greater than comparable nonparticipating students.

#### **Consideration of New Careers**

Career exploration typically involves consideration of different careers and changes in career plans. About 65% of the students participating in the *ASVAB Career Exploration Program* reported the program made them think about careers they had not previously considered. Further, 20% indicated that they changed their career plans after participating in the program. These reports were confirmed by guidance staff survey data.

#### **Gender Issues and Effects**

Over 95% of the guidance staff surveyed felt that the program provided good career exploration information for males and females, and that this information was equally good for both. Participation in the ASVAB program encouraged students, particularly female students, to consider careers typically associated with the opposite sex.

Males and females were equally likely to benefit from program participation, with respect to (a) improvements in their *Career Decision Scale* scores, (b) increases in career exploration knowledge, (c) and increased performance of career exploration behaviors. Nonetheless, proportionally more females felt the program materials were fun to use and reported that the program-identified interests were accurate. However, females were less likely to feel that the program made them more interested in serving in the military.

#### **Racial/Ethnic Issues and Effects**

Over 93% of the guidance staff surveyed felt that the program provided good career exploration information for minority and nonminority students and that this information was equally good for both. Minority and white students were equally likely to benefit from program participation, with respect to (a) improvements in their *Career Decision Scale* scores, (b) increases in the career exploration knowledge, and (c) increased performance of career exploration behaviors. However, proportionally more white students felt that "the interests identified for them by the program described them well" than did minority students. (The interest inventory that was used in this study has been replaced by a new inventory developed by the DoD.)

#### **Program Materials and Program Quality**

Overall, participating students felt that the *ASVAB Career Exploration Program* materials were fun to use. They indicated they were willing to spend their own time using the materials and that the time and effort they spent on the program was worthwhile. About 81% would recommend the program to their friends. Guidance staff agreed; they also felt that students enjoyed using the ASVAB program materials, that students were willing to spend their own time using materials, and that students would recommend the program to their friends.

Guidance staff felt that the program materials accurately measured student abilities, student occupational interests, and occupational preferences. They also felt that both the *Student Workbook* and the *OCCU-FIND* were widely used and easy to understand. *Military Careers* was not as widely used or as easy to understand, but was still felt to be a helpful document.

#### **Program Effects on Career Exploration Behaviors**

Students indicated that the information they acquired as a result of the *ASVAB Career Exploration Program* was used to identify careers that matched their abilities, interests, and preferences, and to make career or education plans.

Guidance staff agreed that participation in the program was responsible for students seeking more career information from guidance counselors, increasing students' knowledge of career planning, and helping students develop more specific career goals and more realistic career plans and decisions.

#### **Ways in Which Students Learn About Military Careers**

Students learn about military career opportunities from a variety of different sources, including military advertisements and literature, friends, family members, military recruiters, and guidance counselors. However, the most frequently reported way in which *ASVAB* program participants learned about military career opportunities was through the program. Program participation also facilitated recruiter contact.

#### **Military Career Knowledge and Attitude Changes**

Students who participated in the *ASVAB Career Exploration Program* were more favorably disposed toward the military and had more positive beliefs about military careers and opportunities prior to their participation in the program than students who did not participate in the program.

After participation, there were significant enhancements in participating students' favorable attitude toward the military and in their knowledge of different careers in the military. Over comparable time periods, nonparticipating students' attitudes about the military became more negative and their knowledge of different military careers decreased.

Students were also asked about their knowledge of specific career opportunities and benefits provided by the military. Nonparticipating students' beliefs about these career opportunities in the military became more negative from the time they were first surveyed (in winter 1995) to their second survey (in spring 1995). *ASVAB* program participants' beliefs, after controlling for other factors, did not exhibit these negative changes.

#### **Effects of the ASVAB Program on Guidance Staff and School Attitude Toward the Military**

In schools that offered the *ASVAB Career Exploration Program*, guidance staff and school attitude toward the military were more positive than in schools that did not use the program. Guidance staff were significantly more favorably disposed toward the military at these schools, and their attitude toward the military became more favorable as a result of participation in the program.



### **Effects of Participation on Likelihood of Student Enlistment**

In order to determine the extent to which the program increased the likelihood of a student choosing a career in the military, students were directly asked about this. Over 33% of the participating students agreed that:

- o The information and guidance materials I got through the ASVAB program made me more interested in serving in the military.

This implies that, in the past two years, as a result of the *ASVAB Career Exploration Program*, the enlistment propensity of over 580,000 students has been increased (33% of a total of 1,745,645 participants in 1993-95).

### **Conclusion**

Participation in the *ASVAB Career Exploration Program* is associated with statistically significant and positive impacts on students. Their career maturity (as measured by the *Career Decision Scale*) increased, they engaged in more career exploration behaviors, and their career exploration knowledge was enhanced. These effects were persistent, lasting for at least one year. The *ASVAB* program worked equally well for males and females and for whites and minorities. Participation in the program also helped to enhance military recruiting goals. These same positive effects were not generally detected in students who did not participate in the *ASVAB Career Exploration Program*.

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*Note.* The *ASVAB Career Exploration Program* was evaluated by the American Institutes for Research with assistance from the Human Resources Research Organization. For information on implementing the program contact the *ASVAB* field representative at 800/323-0513. For technical information about the program, contact Janet E. Wall at 408/583-2400.

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