A study was conducted to determine the motivation for nontraditional students' participation in the off-campus credit programs leading to a master's degree in vocational-technical education at Marshall University (West Virginia). The population for this study consisted of all 319 vocational-technical education (VTE) master's degree recipients for the years 1982-1991 who participated in off-campus degree programs in VTE at the university. Data were collected through a mailed survey that used a Likert-like scale to rank six factors: social contact, social stimulation, professional advancement, community service, external expectations, and cognitive interest as motivators. A total of 175 usable responses (55 percent) was received after initial mailing and follow-up. The study showed that the 175 degree recipients (most of whom were white and 30-34 years of age when they participated in the program) were more influenced in enrolling for professional advancement and cognitive interest reasons; they were least likely to be enrolled for social contact, social stimulation, and external expectations. Women were more likely than men to be enrolled for professional advancement and cognitive interest. Respondents aged 50-54 were more inclined to enroll for professional advancement, cognitive interest, community service, and external expectations reasons. Based on the study, recommendations were made to increase enrollment of nonwhite persons in the off-campus credit programs, to make program planners aware of the importance of professional development in student motivation, and to use cognitive interest factors to provide direction in programming decisions. (Contains 10 references.)
MOTIVATIONAL ORIENTATIONS OF VOCATIONAL-TECHNICAL EDUCATION
GRADUATES IN OFF-CAMPUS CREDIT PROGRAMS

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Synopsis

The primary purpose of this study was to determine the motivation for participation in off-campus credit programs. Overall, the findings indicate that graduates were more influenced to enroll due to Professional Advancement, Cognitive Interest, and Community Service reasons than for other reasons. Respondents who completed their graduate degree within the 50-54 years category were more inclined to enroll due to four of the six factors (Professional Advancement, Cognitive Interest, Community Service, and External Expections). This study provides baseline data for further studies in motivational research pertaining to Vocational, Technical, and Adult Education.

Introduction

A bold initiative was undertaken in the mid-sixties at Marshall University in West Virginia. A master of science degree program with a state-wide mission was conceptualized in a cooperative arrangement between the West Virginia Department of Education and Marshall University. Faculty were employed in 1969 to provide direction in the development and implementation of the new M.S. degree program in Vocational and Technical Education.

The off-campus credit programs were developed to serve vocational-technical education (VIE) students who are unable to come to the Marshall University campus. The success and continuation of these programs is dependent upon student participation. Hone (1984) found that the common denominator for success of rural post-secondary education programs is to directly address the needs and expectations of the program participants. To promote program development, Christmas (1990) points out a need for identification of factors that motivate adults to participate in agricultural education programs.

Miller and Crawford (1990) indicated that the factor "Cognitive Interest" was the greatest motivator for participants to enroll in off-campus courses.
Data from Miller and Crawford's (1990) study also revealed that the factor "Professional Advancement" was rated significantly higher by the off-campus participants when compared with the normative group in their study.

According to Boshier and Collins (1983), a persistent theme in motivational orientation research concerns the structure of "motives" for participation based on variables in the life cycle (age, sex, etc.) and socio-economic domains. Researchers have also shown a marked interest in participation and enrolling in credit classes (Johnston and Rivera, 1965; London, Wenkert, and Hagstron, 1963).

**Purpose and Objectives**

The purpose of this study was to determine the motivation for participation in off-campus credit programs. The specific objectives of this study were to:

a. Describe demographic characteristics regarding vocational-technical education (VTE) graduates.

b. Identify the motivational orientations of VTE graduates and the level of influence to enroll in off-campus credit courses.

c. Determine the level of influence selected variables had on the motivational orientations of VTE graduates to enroll in off-campus credit courses.

**Significance of the Study**

A study of this nature is of primary importance to the success of programs involving non-traditional university enrollees. Knowing what motivates people to enroll and participate is central to the programs, not only in terms of obtaining initial enrollees, but also in terms of how to retain and better serve the population.
Limitations of the Study

Because of the scant research data available on motivational factors associated with enrollment in such programs, this study sought to develop important baseline data. Thus the entire population of VIE graduates were surveyed. Consequently, the data does not lend themselves to tests of statistical significance.

Research Procedures

This study utilized descriptive research methodology. Gay (1981, p. 12) summarized the purpose of descriptive research as research that "determines and reports the way things are." Applied research studies are best characterized as those which concentrate on educational methodology and structure as they appear in practice (Borg and Gall, 1983). The ultimate goal of applied research is to be of direct utility to practicing educators.

Population The population for this study consisted of all (N=319) Vocational-Technical Education (VIE) master's degree recipients, for the years 1982-1991, who participated in off-campus degree programs in VIE at Marshall University. Sampling procedures were not utilized since the entire population was surveyed. The annual Marshall University Commencement Program for the academic years from 1982-1991 were used to identify the population and served as the database for the study. Names and last known addresses of graduates were obtained from the Office of the Dean of Graduate Studies, Records & Research, and the Department Chair for VIE.

Instrumentation An information sheet was developed by the researchers to collect demographic and situational data. In order to insure content validity, the information sheet was reviewed by a panel of judges selected from higher education institutions. The Education Participation Scale (EPS) (Boshier, 1982) was used to determine the motivational orientation of the participants.
The (EPS) is a 40 item scale scored on a four point Likert-type basis (No Influence=1; Little Influence=2; Moderate Influence=3; Much Influence=4). The items are divided into six factors with factor reliability estimates ranging from alpha of 0.80 to alpha of 0.88. The six factors are:

a. Social Contact: Reflects a desire to develop or improve one's relationship with other people.
b. Social Stimulation: Reflects a need to find intellectual stimulation as an escape from routine or frustration situations.
c. Professional Advancement: Reflects a need to improve occupational status or performance.
d. Community Service: Reflects a selfless concern for other people. Many times reflected by a desire to participate in community affairs.
e. External Expectations: Reflects the presence of pressure to participate in educational activities from another person or circumstances.
f. Cognitive Interest: Reflects the view of learning as a way of life and the belief in the concept of learning for the sake of learning.

Appropriateness and permission of the use of this instrument for this study was discussed with the author.

Data Collection Data were collected between February 12, 1992 and April 30, 1992. All 319 graduates identified were sent a cover letter, an information sheet and an EPS instrument. After the initial mailing and two follow-up mailings, a total of 175 responses (55%) had been received. All returns received one week or later after the first follow-up mailing were classified as late respondents. A non-response bias procedure, the early/late response approach as described by (Miller and Smith, 1983), was used to determine non-response bias in their response to each question. No significant differences were found.
**Analysis of Data** Data were analyzed using Lotus 1-2-3 and Harvard Graphics (version 2.3). Percentages, comparison of means and standard deviations were used to describe the data.

**Findings**

**Demographic Characteristics of Participants** Findings reported in this subsection were generated from the Information Sheet of the instrument packet. Over 30% of the participants came from communities of 5,000 to 25,000 (Figure 1).

A total of 121 or 69% of the participants were female and 54 or 31% were male. The highest percentage of participants (31%) completed their M.S. degree within the age category of 30-34 years as illustrated in Figure 2.

The ethnic makeup consisted of 96.6% (169) whites and 3.4% (6) nonwhites. Nonwhites consisted of: African American (2), Native American (2), Hispanic (1) and Asian (1).

Over 95% of the participants were employed full-time while taking off-campus classes.

**Participation Motivation**

This subsection includes findings derived from the EPS. The second objective of this study was to identify the motivational orientations of VTE graduates and the level of influence to enroll in off-campus credit courses.
The EPS contains forty questions cast with a four-point response scale. These questions were then factored in a large scale empirical test (Boshier and Collins, 1983). Six factors were identified. They are: (a) Social Contact, (b) Social Stimulation, (c) Professional Advancement, (d) Community Service, (e) External Expectations, and (f) Cognitive Interest. Scoring of the instrument was followed using the guidelines provided by the author of the EPS.

Table 1 provides the mean factor ratings and standard deviations of the off-campus program participants. "Professional Advancement" was given the highest rating by participants with a mean score of 3.14 (standard deviation=0.44). "Cognitive Interest" was of next greatest importance with a mean score of 2.36 (standard deviation=0.78). "Community Service" had a mean score of 2.12 (standard deviation=0.73). These three factors were the only factors rated between the descriptions "Little Influence" and "Moderate Influence". "Social Contact", "Social Stimulation", and "External Expectations" had mean ratings of 1.48, 1.41, and 1.80, respectively. These factors were rated "No Influence".

Insert Table 1 about here

Influence of Selected Variables on Participation Motivation

This subsection also includes findings derived from the EPS. The third objective of this study was to determine the level of influence that selected variables had on the motivational orientations of VIE graduates to enroll in off-campus credit courses.

Table 2 shows mean comparisons of factors by gender. The mean ratings of factors for female participants were higher for "Professional Advancement"
(3.18) and "Cognitive Interest" (2.34) than their male counterparts. "Social Contact", "Social Stimulation", and "External Expectations" were rated as "No Influence" by male and female participants.

Insert Table 2 about here

Table 3 reflects the means comparisons of factors in relationship to the age at which participants completed their M.S. degree.

"Professional Advancement" was given the highest rating with a mean score of 3.43 (standard deviation = 0.33). This rating came from respondents who completed their degree at 50-54 years old. "Cognitive Interest" was of next greatest importance with a mean score of 2.82 (standard deviation=0.69 as indicated by respondents who completed their degree at 45-49 years old. Respondents who completed their degree at 30-34 years, 40-44 years, 45-49 years and 50-54 years had mean ratings of 2.25, 2.41, 2.26, and 2.12 respectively for the "Community Service" factor. "External Expectations" had "Little Influence" on only respondents who completed their graduate degree in the 50-54 years age category. The mean rating for this category was 2.08.

Discussion and Conclusions

Off-campus courses were available to graduates who resided in most counties in the state of West Virginia while pursuing their M.S. degree. This is an indication that Marshall University offered courses throughout the state in an effort to meet its state-wide mission. Participants in the program were quiet homogeneous in that most were women from a community of 5,000-25,000 individuals. The highest percentage of participants completed their M.S. degree within the age category of 30-34 years. All participants in the study were
employed while taking off-campus courses. The ethnic makeup of respondents consisted of over 95% white students.

The 175 participants were more influenced to be enrolled for Professional Advancement and Cognitive Interest reasons. Participants were least likely to be enrolled for "Social Contact", "Social Stimulation", and "External Expectation" reasons.

Women were more influenced than men to be enrolled for Professional Advancement and Cognitive Interest reasons. It is the opinion of the researchers that this could be attributed to futurists' predictions about the changing make-up of the labor force, which indicate, that more women will be working full-time in a wider range of occupations. This finding may also reflect the gender equity issue which is taken seriously by education leaders in West Virginia.

Respondents who completed their graduate degree within the 50-54 years category were more inclined to enroll due to four of the six factors (Professional Advancement", "Cognitive Interest", "Community Service", and "External Expectations"). This is particularly true when compared with the other age categories as indicated by Table 3. It is therefore likely to assume that some of these older respondents were encouraged or pressured to participate in the off-campus credit programs from another person or circumstances.

Recommendations

Based on findings and conclusions of this study, the following recommendations are suggested:

a. Nonwhite graduates were underrepresented as participants in this study. It is therefore recommended that strategies be implemented to encourage nonwhite enrollment and participation in off-campus credit programs.
b. Program planners should be aware of the importance of professional development as it impacts upon motivation for participation. Courses should be planned to offer opportunities to improve job performance.

c. Motivation provided by the "Cognitive Interest" factor provides clear direction for programming decisions. Program planning for persons in specific occupations should be tailored to specific requirements or needs.

d. Courses should be developed which allow for a high degree of interactions.

e. This study should be used by faculty and administrators as they examine the effectiveness of off-campus credit programs within the department.

f. This study provides baseline data for future studies pertaining to motivational research in vocational, technical and adult education.

g. The results of similar studies in other states could be useful as a program evaluation tool for guiding, modifying and changing vocational, technical and adult education programs where necessary.
References


Figure 1. Community distribution of vocational education graduates.
Figure 2. Age at which vocational education graduates completed their degree (M.S.).
<table>
<thead>
<tr>
<th>Factor</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>( N=175 )</th>
</tr>
</thead>
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<tr>
<td>Social Contact</td>
<td>1.48</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Social Stimulation</td>
<td>1.41</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Professional Advancement</td>
<td>3.14</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Community Service</td>
<td>2.12</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>External Expectations</td>
<td>1.80</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Cognitive Interest</td>
<td>2.36</td>
<td>0.78</td>
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</table>

\( a \)

Scale values: No Influence = 1; Little Influence = 2; Moderate Influence = 3; Much Influence = 4.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Males n=54</th>
<th>Females n=121</th>
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<tr>
<td></td>
<td>$\bar{x}^a$</td>
<td>SD</td>
</tr>
<tr>
<td>Social Contact</td>
<td>1.58</td>
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<tr>
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<tr>
<td>Cognitive Interest</td>
<td>2.32</td>
<td>0.80</td>
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</table>

Scale values: No Influence = 1; Little Influence = 2; Moderate Influence = 3; Much Influence = 4.
Table 3
Means Comparisons of Factors by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>25-29 yrs (n=24)</th>
<th>30-34 yrs (n=55)</th>
<th>35-39 yrs (n=37)</th>
<th>40-44 yrs (n=24)</th>
<th>45-49 yrs (n=15)</th>
<th>50-54 yrs (n=14)</th>
<th>55 yrs or over (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Contact</td>
<td>1.40 0.44</td>
<td>1.40 0.40</td>
<td>1.56 0.47</td>
<td>1.47 0.43</td>
<td>1.73 0.50</td>
<td>1.49 0.38</td>
<td>1.40 0.41</td>
</tr>
<tr>
<td>Social Stimulation</td>
<td>1.42 0.40</td>
<td>1.40 0.42</td>
<td>1.43 0.47</td>
<td>1.42 0.41</td>
<td>1.52 0.34</td>
<td>1.40 0.37</td>
<td>1.27 0.30</td>
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<tr>
<td>Professional Advancement</td>
<td>3.09 0.40</td>
<td>3.19 0.34</td>
<td>3.09 0.51</td>
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<td>3.43 0.33</td>
<td>3.18 0.23</td>
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<tr>
<td>Community Service</td>
<td>1.86 0.70</td>
<td>2.25 0.59</td>
<td>1.93 0.79</td>
<td>2.41 0.87</td>
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<td>2.12 0.54</td>
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<td>Cognitive Interest</td>
<td>2.36 0.76</td>
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<td>2.29 0.80</td>
<td>2.62 0.86</td>
<td>2.82 0.69</td>
<td>2.46 0.68</td>
<td>2.26 0.76</td>
</tr>
</tbody>
</table>

Scale values: No Influence = 1; Little Influence = 2; Moderate Influence = 3; Much Influence = 4.