A total of 235 vocational, technical, and adult education (VTAE) master's degree recipients participated in a study to determine motivation for participation in off-campus credit programs. The study population participated in off-campus degree programs in VTAE at Marshall University (West Virginia). An information sheet collected demographic and situational data. The Education Participation Scale (Boshier, 1982) was used to determine the motivational orientation. The 40 items on the 4-point response scale were divided into 6 factors: social contact, social stimulation, professional advancement, community service, external expectations, and cognitive interest. Findings indicated that graduates were more inclined to be enrolled for professional advancement and cognitive interest reasons. Older participants were more inclined to be enrolled for community service reasons. Motivational orientations were found to differ among persons in different occupational fields. The study was recommended as baseline data for further studies in motivational research pertaining to VTAE. (Appendixes include a list of 10 references, 2 figures, and 4 tables.) (YLB)
ASSessment of the Motivational orientations of vocational, technical and Adult education graduates in off-campus credit programs.

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 be enrolled for Professional Advancement and Cognitive Interest reasons. Older participants were more inclined to be enrolled for Community Service reasons. Motivation orientations were found to differ among persons in different occupational fields. 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.

Selected specializations, certificate programs, and courses were added to supplement the original M.S. degree program. An M.S. degree in Adult Education was developed in 1973 and an M.A. degree in Marketing Education in 1978. An existing M.A. degree in Office Administration was transferred from the College of Business to the department in 1986.
In 1972, seven students earned their master's degrees in vocational and technical education. During the years 1972 through 1991 a total of eight hundred and eleven (811) students successfully completed masters degrees through the Department of Vocational, Technical, and Adult Education. All but a few students completed their degrees while employed on a full-time basis.

The off-campus credit programs were developed to serve vocational, technical, and adult education (VTAE) 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. Christmas (1990) points out a need for identification of factors that motivate adults to participate in agricultural education programs.

Miller (1990) indicated that the factor "Cognitive Interest" was the greatest motivator for participants to enroll in off-campus courses. Data from Miller'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 his 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 market interest in participation and enrolling in credit classes (for example, Johnston and Rivera 1965; London et al. 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:
1. Describe demographic characteristics regarding vocational, technical, and adult education (VTAE) graduates.

2. Identify the motivational orientation of VTAE graduates and the level of influence to enroll in off-campus credit courses.

3. Determine the level of influence selected variables had on the motivational orientations of VTAE 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.

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=417) Vocational, Technical and Adult Education (VTAE) master's degree recipients, for the years 1982-1991, who participated in off-campus degree programs in VTAE 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, the Alumni Office, and the Department Chair for VTAE.

**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 deemed experts in the area of motivational research. 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 response 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:

1. Social Contact: Reflects a desire to develop or improve one's relationship with other people.
2. Social Stimulation: Reflects a need to find intellectual stimulation as an escape from routine or frustration situations.
3. Professional Advancement: Reflects a need to improve occupational status or performance.
4. Community Service: Reflects a selfless concern for other people. Many times reflected by a desire to participate in community affairs.
5. External Expectations: Reflects the presence of pressure to participate in educational activities from another person or circumstances.
6. 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 of the use of this instrument for this study was discussed with the author. Additionally, permission was obtained for use of the EPS.

**Data Collection:** Data were collected between February 12, 1992 through April 30, 1992. All 417 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 235 responses (56%) had been received. However, five of the returned instruments were incomplete, resulting in a 55% usable return. 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. The researchers selected these statistical measures because of their appropriateness. No tests of statistical significance were conducted because the total relevant population was surveyed.

**Findings**

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

A total of 166 or 72% of the participants were female and 64 or 28% were male. The highest percentage of participants (28%) completed their M.S./M.A.
degree within the age category of 30-34 years as illustrated in Figure 2.

Insert Figure 2 about here

The ethnic makeup consisted of 96.5% (222) whites and 3.5% (8) nonwhites. Nonwhites consisted of: African American (4), Native American (2), Hispanic (1) and Asian (1).

Over 95% of the participants were employed full-time while taking off-campus classes. Technical Education Professionals made up 76% of the respondents. The remaining respondents were: Adult Education Professionals (17%), Business Education Professionals (5%) and Marketing Education Professionals (2%).

Participation Motivation

This subsection includes findings derived from the EPS. The second objective of this study was to identify the motivational orientations of VTAE 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: (1) Social Contact, (2) Social Stimulation, (3) Professional Advancement, (4) Community Service, (5) External Expectations, and (6) Cognitive Interest. Scoring of the instrument 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 3.13 (standard deviation=0.41). "Cognitive Interest" was of next greatest importance with a mean score of 2.36 (standard deviation=0.70). These two factors were the only
factors rated between the descriptions "Little Influence" and "Moderate Influence". "Social Contact", "Social Stimulation", "Community Service" and "External Expectations" had mean ratings of 1.50, 1.43, 1.98 and 1.79, respectively. These factors were rated "No Influence".

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 VTAE graduates to enroll in off-campus credit courses.

Table 2 shows means comparisons of factors by gender. The mean ratings of factors for female participants were higher for "Professional Advancement" (3.16) and "Cognitive Interest" (2.48) than their male counterparts. However, male participants had a higher mean rating (2.13) for "Community Service". "Social Contact", "Social Stimulation", and "External Expectations" were rated as "No Influence" by male and female participants.

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

"Professional Advancement" was given the highest rating with a mean score of 3.20 (standard deviation = 0.57). 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 2.67 (standard deviation=0.8) as indicated by respondents who completed their degree at 45-49 years old. Respondents who completed their degree at 40-44 years, 45-49 years and 50-54 years had mean ratings of 2.30, 2.12, and 2.11 respectively for the "Community Service" factor.

The fourth objective of this study was to compare motivational orientations of graduates of the four separate programs (Adult Education, Business Education, Marketing Education and Vocational-Technical Education).

Groups were categorized to reflect the following occupational areas: (1) Business Education Professionals, (2) Technical Education Professionals, (3) Adult Education Professionals and (4) Marketing Education Professionals as indicated by Table 4. However, technical education does not represent a single occupational group. Technical Education professionals consist of graduates who hold undergraduate degrees and certification in agriculture education, business education, home economics, industrial education, marketing education, or technical-industrial education and completed their M.S. degree in VTE.

Marketing Education Professionals had the overall highest mean rating (3.36) on the "Professional Advancement" factor. Business Education Professionals accounted for the highest mean rating (3.20) on the "Cognitive Interest" factor. When compared with the other groups, Adult and Business Education Professionals had the highest, and also identical mean ratings (2.08)
on the "Community Service" factor. "Social Contact", "Social Stimulation", and "External Expectations" were rated as "No Influence" by participants of the four occupational areas.

Insert Table 4 about here

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./M.A. 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./M.A. 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 90% white and most were Technical Education Professionals.

The 230 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 sex equity issue which is taken seriously by education leaders in West Virginia.
Older participants were more inclined to be enrolled for Community Service reasons. It is likely to assume that older participants had a selfless concern for other people. Many times this is reflected by a desire to participate in community affairs.

Motivation orientations were found to differ among persons in different occupations. Persons in Marketing Education were more interested in "Professional Advancement" than others. It is surmised that additional formal education assists in promotions and/or wage increase potential. Business Education personnel were more influenced than others to complete the master's degree for reasons related to cognitive interest. The researchers believe that this is due to the drive by individuals in the field of business to focus on quality performance.

**Recommendations**

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

1. 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.
2. 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.
3. 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.
4. Courses should be developed which allow for a high degree of interactions.
5. This study should be used by faculty and administrators as they examine
the effectiveness of off-campus credit programs.

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

7. 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.

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Figure 1. Community distribution of graduates.
Age 30-34 28%
Age 35-39 23%
Age 40-44 15%
Age 45-49 8%
Age 50-54 8%
Age 55 or over 2%

Figure 2. Age at which graduates completed their degree (M.S./M.A.).
TABLE 1
Factor Means, and Standard Deviations of Participants

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<thead>
<tr>
<th>Factor</th>
<th>$\bar{X}^a$</th>
<th>SD</th>
<th>(N=230)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Contact</td>
<td>1.50</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Social Stimulation</td>
<td>1.43</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Professional Advancement</td>
<td>3.13</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Community Service</td>
<td>1.98</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>External Expectations</td>
<td>1.79</td>
<td>0.55</td>
<td></td>
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<tr>
<td>Cognitive Interest</td>
<td>2.36</td>
<td>0.70</td>
<td></td>
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$^a$ Scale values: No Influence = 1; Little Influence = 2; Moderate Influence = 3; Much Influence = 4.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Gender</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Males n=64</td>
<td>Females n=166</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Contact</td>
<td>1.58</td>
<td>0.48</td>
<td>1.47</td>
<td>0.44</td>
</tr>
<tr>
<td>Social Stimulation</td>
<td>1.48</td>
<td>0.42</td>
<td>1.42</td>
<td>0.41</td>
</tr>
<tr>
<td>Professional Advancement</td>
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<td>0.48</td>
<td>3.16</td>
<td>0.42</td>
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<td>Community Service</td>
<td>2.13</td>
<td>0.71</td>
<td>1.92</td>
<td>0.70</td>
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<tr>
<td>External Expectations</td>
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<td>0.56</td>
<td>1.78</td>
<td>0.67</td>
</tr>
<tr>
<td>Cognitive Interest</td>
<td>2.33</td>
<td>0.80</td>
<td>2.48</td>
<td>0.79</td>
</tr>
</tbody>
</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>Factor</th>
<th>25-29 yrs. (n=36)</th>
<th>30-34 yrs. (n=65)</th>
<th>35-39 yrs. (n=52)</th>
<th>40-44 yrs. (n=34)</th>
<th>45-49 yrs. (n=19)</th>
<th>50-54 yrs. (n=19)</th>
<th>55 or over (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Scale values: No Influence = 1; Little Influence = 2; Moderate Influence = 3; Much Influence = 4.
### Table 4
MEANS COMPARISONS OF FACTORS BY OCCUPATION

<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>n=12</td>
<td>n=175</td>
<td>n=38</td>
<td>n=5</td>
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<tr>
<td>Social Contact</td>
<td>1.47 0.39</td>
<td>1.48 0.44</td>
<td>1.60 0.50</td>
<td>1.37 0.29</td>
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<tr>
<td>Social Stimulation</td>
<td>1.48 0.38</td>
<td>1.41 0.41</td>
<td>1.54 0.44</td>
<td>1.67 0.49</td>
</tr>
<tr>
<td>Professional Advancement</td>
<td>3.15 0.57</td>
<td>3.14 0.42</td>
<td>2.97 0.48</td>
<td>3.36 0.20</td>
</tr>
<tr>
<td>Community Service</td>
<td>1.99 0.56</td>
<td>1.97 0.73</td>
<td>2.06 0.67</td>
<td>2.08 0.64</td>
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<tr>
<td>External Expectations</td>
<td>1.58 0.63</td>
<td>1.80 0.63</td>
<td>1.75 0.64</td>
<td>1.60 0.31</td>
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<tr>
<td>Cognitive Interest</td>
<td>3.20 0.78</td>
<td>2.35 0.78</td>
<td>2.57 0.79</td>
<td>2.87 0.49</td>
</tr>
</tbody>
</table>

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