

**MOTIVATION OF MANAGERS ASSIGNED TO A FEDERAL AGENCY
TOWARDS PARTICIPATION IN
GOVERNMENT-SPONSORED TRAINING**

Alan B. Nason

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Albert K. Wiswell, Chair
Harold Stubblefield
Marcie Boucouvalas
Thomas Reio
Melissa Howard

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(ABSTRACT)

This study examined the motivations of managers in a Federal government agency to participate or not participate in voluntary government-sponsored training. The researcher distributed a questionnaire, via agency electronic mail, to managers and supervisors in the Federal Emergency Management Agency (FEMA). The questionnaire comprised items selected from three instruments used and validated in previous adult education participation studies and provided the data for this study. Section 1 of the questionnaire addressed demographics, Section 2 addressed non-participation, and Section 3 addressed participation. Respondents rated the degree of influence or importance each item had on their decision to participate or not to participate in government-sponsored training.

The data revealed the relative importance of the reasons for participation and non-participation and their relationship to the demographic variables. Cognitive interest and professional advancement were the primary motivations for participation in training. Lack of course relevance and time constraints were the primary motivations for not participating in training. There was no significant difference in motivation between men and women managers for either participation or non-participation. Other demographic variables had low to mid-range correlations with specific reasons for participation and non-participation, none of which were concentrated on a single cluster or factor.

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CHAPTER I

INTRODUCTION

Eighty-five percent of America's workforce for the year 2000 are working today (U.S. Department of Education, 1991). Additionally, "the expansion of the number of tasks and responsibilities assigned to government at all levels in the last 30 years has been astronomical" (Sherwood, 1997, p. 211). At a time when the Federal work force is being downsized, workers who remain will have to absorb additional unfamiliar functions. Not only will the amount of work change, but with the rapid advance of technology, the nature of work within the government will continue to change, adding such concepts as flextime, flexiplace, and telecommuting to the workplace jargon (Abramson, 1997).

As Federal agencies streamline and re-engineer their business processes, fewer managers will be available to supervise the workforce. Management layers are disappearing; there are fewer assistants and deputies. This means managers will have a greater span of control; that is, they will have to manage more people who have more work to do. Additionally, as work within the government becomes information-based, managers will have to learn a new set of supervisory skills. According to Abramson (1997), the command and control style of leadership may soon become obsolete.

Managers may also be faced with a less competent pool of employees to manage. As labor markets become tighter during the 1990s, hiring qualified workers will become much more difficult and the average qualifications and competence of many segments of the Federal workforce will deteriorate (U.S. Office of Personnel Management, 1988).

To help managers cope with the daunting challenges that lie ahead, most Federal departments and agencies maintain a curriculum of professional development opportunities for managers to enhance their skills and job knowledge. For example, managers who wish to further their educational development may attend programs sponsored by the United States Department of Agriculture Graduate School, the Department of Labor Academy, and the Federal Executive Institute.

There is a strategic value to training that will enhance performance (Brinkerhoff & Gill, 1994). But what if a wide variety of professional development opportunities existed and those that needed to attend did not? Resources not only would have been wasted in the development of that training, but Federal managers would remain at a stagnant level of capability.

An important question is why Federal employees in management positions do or do not participate in training. Armed with this knowledge, training developers, practitioners, and high-level leadership within Federal agencies may be able to maximize management training and enhance management performance. This study examined the motivations for participation and non-participation in voluntary government-sponsored training programs by managers assigned to a selected Federal agency.

Background of the Problem

Houle (1961), a pioneer in adult education, determined there was significant evidence to believe adult learners could be loosely associated with one of three broad motivational orientations. Some adults are goal-oriented (they have an objective), some learning-oriented (they want to learn for the sake of learning), and some activity-oriented (they want to be around people). Boshier conducted studies that analyzed reasons for participation in adult education

based on Houle's three categories (Boshier, 1971, 1976, Boshier & Collins, 1985) and found Houle's typology to be more complicated than originally presented.

Long (1987) reviewed participation in adult education and focused on two areas: trends in educational participation, and the variables often used in participation research. Most of the literature reviewed by Long (1987) examined participation rates in relation to demographic variable such as age, gender, education level, and income. Very little presented by Long (1987) dealt with actual motivation to participate.

Sean Courtney (1992) lamented that participation research was more demographic than attitudinal. Researchers could tell you who was participating in adult education, but could not as robustly substantiate why they acted as they did. Courtney (1992) contended that motivational aspects of participation in adult education are important aspects of participation research.

Other researchers such as Cross (1979), Scanlan and Darkenwald (1984), and Darkenwald and Valentine (1985) studied deterrents to participation.

Research on motives for participation in adult education tended to center around three groups of theory: decision models, life cycle theory, and motivational orientations (Courtney, 1992). Decision models are those that identify a sequence of decisions that eventually lead to participation. Life cycle theory attempts to correlate participation in adult education with the developmental stages one might go through in life and with the assumptions of andragogy. During transitional phases, learning needs emerge to cope with life's changes. Motivational orientations, traditionally based on Houle's typology, focus on temperament, personality, and the origins of the learning need.

Most adult education participation research has focused on heterogeneous samples, with fewer studies focusing on specific groups. According to Courtney (1992) from 1950 to 1987, several studies were undertaken to review the participation rates of particular adult learning populations such as the museum community, the Great Books Program, University Extension, the Community College, and Voluntary Associations. Few studies have focused on specific job-related populations. Two exceptions were Hedoux, who studied French mining communities (McGivney, 1990), and Scanlan and Darkenwald (1984), who used a sample of nurses to study deterrents to participation. Governanti (1980) used the *Education Participation Scale* to examine the motivations of students at Jamestown Community College. The subjects in most of these studies were taken from the private sector of the population.

Little has been done to examine the motivation towards training of the Federal employee, a unique and important public sector workforce. There are several characteristics that make Federal employees unique when compared to workers in the private sector:

- Federal employees constitute one of the largest centrally managed workforces in the nation.
- The functions performed by this group generally affect the broader population and the quality of the performance of those functions is most often experienced nationwide.
- The personnel policies that govern the public workforce are subject to immense political influences (Hyde, Riccucci, Rosenbloom, & Shafritz, 1992).
- Salaries are established by law, subject to public scrutiny, and generally fall below those in the private sector. “It is especially difficult to attract and retain policy-level executives of high caliber and representativeness if salaries are not at least near the high levels their private-sector colleagues expect” (Holzer, 1991, p. 12).

- There appear to be few tangible incentives to participate in training (Hyde, 1992).

The subjects for this study are a part of this unique workforce--employees in management positions. This study examined the motivation of managers in the Federal Emergency Management Agency (FEMA) toward participation in training. The Federal Emergency Management Agency was selected for this study because its mission and scope of responsibilities are more complex than most Federal departments and agencies. The Federal Emergency Management Agency is the executive agent responsible for administration of the nation's Federal disaster response program. As such, its employees perform a variety of highly-visible and valuable functions. Managers within FEMA must manage day-to-day operations of the agency and always be prepared to manage disaster response operations both at their normal work sites and at disaster sites throughout the nation. This includes coordinating the efforts of disaster responders from twenty-eight Federal departments and agencies, as well as numerous representatives from private industry.

The rationale for studying participation within an organization is found in Courtney's (1992) belief that education participation is bound up in broader social behavior with such factors as occupational status, standing in the community, and self-worth having an impact. Almost everything we do is bound up in some type of organizational context. That organization's attitude towards education does a great deal to shape an individual's attitude toward participating in adult education. Courtney (1992) stated the following:

A focus on organizations draws our attention to a simple but powerful fact: much of our lives are lived within organizations which are responsible for how we behave and how we think. Thus, we might begin to think of how organizations

themselves, particularly work-related ones, construct or embody an attitude towards learning: what employers believe learning is really about, what they see as its final end, and what role they see it playing not only in their organization's day-to-day affairs but also in that of their employees (p. 112).

The skills and knowledge to perform complex management functions are gained in a variety of ways: personal experience, mentoring, formal and informal instruction. Some Federal departments and agencies have established robust executive development systems, but many others have not (Hyde, 1992). The more successful management training programs are those that are supported by top management, have an executive review board, and publish training and development policy.

The training programs to help these managers achieve and maintain the skills and knowledge they need to accomplish their missions are, for the most part, voluntary. The Office of Personnel Management and, for FEMA managers, FEMA's Analysis and Design Branch at the Headquarters in Washington, D.C., offers a variety of training and development opportunities. The decision to participate or not to participate is a product of a multitude of forces influencing that decision. According to Mr. R. Salter, Chief, Analysis and Design Branch, Training Division, Preparedness, Training & Exercises Directorate, FEMA (personal communication, September 2, 1996), the FEMA training staff and the Agency leadership should know what those forces are and how they influence the Agency's managers to participate or not participate in the training offered.

Statement of the Problem

Most early participation studies have focused on the demographics of the populations studied. Thus, researchers were able to determine the propensity for participation by women, men, the young, the aged, blacks, Hispanics, whites, the poor, the well-to-do, the well-educated, and the poorly educated. A 1975 study by the National Center for Education Statistics showed the predominant socioeconomic factors relating to participation were *amount of formal schooling* and *age* (Darkenwald and Merriam, 1982). Although significant, demographic variables appear inadequate to explain participation in adult education. Other factors, which need to be analyzed, may be stronger determinants of participation in adult education (Courtney, 1992). While demographic information may be useful in determining who participates and does not participate in adult education, e.g., men or women, rich or poor, it does not get to the matter of why adults participate or do not participate in education programs, e.g., too expensive, not relevant to the job. Only within the last twenty years have researchers focused efforts toward finding out not simply who attends, but why.

In a few cases, researchers studied specific groups to determine the motivation for participation of factory workers and nurses, for example. Although some studies explained participation rates among adult learners, few have examined the motivation of United States Federal government managers to participate in training. This study attempts to fill that void by examining the motivation of managers in the Federal Emergency Management Agency to participate in one particular type of adult education--government-sponsored training.

There are over 165 supervisors and managers in FEMA assigned to a variety of positions located at the headquarters in Washington, D.C.; the National Emergency Training Center in

Emmitsburg, Maryland; the Mount Weather Emergency Assistance Center in Bluemont, Virginia; and the ten Federal regions throughout the United States. A robust menu of government-sponsored training opportunities exists for which Federal employees in management positions may volunteer. Yet, of these approximately 165 personnel who are eligible to participate, only 12 percent are on record as having participated in training. This participation rate is considered to be far short of expectations (R. Salter, personal communication, September 2, 1996). This participation rate is less than half of that for private sector establishments of 50 employees or more (U.S. Department of Labor, 1997). If this low participation rate continues, the knowledge and skill base of managers in the Agency may, at best, stagnate or, at worst, atrophy. If this participation rate is endemic to the Federal government, the problem would be magnified.

The problem upon which this study focused is the relative dearth of research into why managers in the Federal government do or do not participate in government-sponsored training.

Purpose of the Study

The purpose of this study was to examine the motivation for FEMA managers to participate or not participate in government-sponsored training opportunities.

This study sought to provide adult education practitioners, particularly those whose clientele is the Federal workforce, insights on how to design, advertise, and present training that could encourage enrollment. The results of this study also may provide insights into participation applicable to other government agencies with a similar culture, and may encourage further research in adult education participation. A secondary purpose of this study was to

identify any changes that could be made in FEMA to enhance manager participation in training programs.

Research Questions

The following questions served as the focus for this study:

1. What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for participating in government-sponsored training?
2. What are the relationships between the variables of age, gender, education level, geographic location of assignment, and family income and the reasons cited for participating in government-sponsored training?
3. What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for not participating in government-sponsored training?
4. What are the relationships among the variables of age, gender, education level, geographic location of assignment and family income and the reasons cited for not participating in government-sponsored training?
5. How do participants and non-participants in government-sponsored training compare with respect to gender, geographic location of assignment, age, education level, and family income?

Importance of the Study

Darkenwald and Merriam (1982) stressed that participation studies in adult education are analogous to market analysis in business. That is, if you want your business, in this case a training program, to survive, you must identify and analyze your customers' needs and wants. Then, you create a product, i.e., a training program, that meets those needs. Part of this analysis

is determining what factors will have an influence on the customers' desire to buy the product.

There are a variety of influences that effect participation in training. Some of these are personal (e.g., goals, family life), some are organizational (e.g., incentives, leadership climate), and others are environmental (e.g., transportation, time of day, training facilities). If the reasons for participation and non-participation can be identified and brought to the attention of those who influence those reasons, positive factors can be maximized and negative factors can be minimized in order to increase participation in training.

Perhaps the only influences over which the employer has some control are those categorized as organizational or institutional (Darkenwald & Merriam, 1982). However, the recognition of motivational influences in all categories by the employer should provide a broader base of understanding to enhance participation motivation. The benefit to the organization would be increased manager development and a concomitant increase in manager and employee capability. The benefit to the managers could be increased income, self-worth, and greater job satisfaction.

An evaluation of the reasons that have the greatest impact on the desire to participate may predict future levels of participation in training. Thus, an organization may be able to predict and mitigate against a future capability shortfall.

Participation research should also be of value to adult education practitioners: the results of such research could help them design their instruction more closely aligned to the participation motives of their students. Additionally, participation research can help determine what needs to be included in the curriculum for students of adult education (Courtney, 1992). Not only might this increase participation, but attention and learning may be enhanced with training that is

considered more relevant to the participants' needs--a factor that plays an important role in the design of adult education programs (Knowles, 1973).

Finally, the results of this study will add to the base of research already conducted on participation in adult education. Each contribution to this base helps make clearer the motivation of adults to participate and not participate, and adds to the body of knowledge in the field of study.

Limitations

The data used in this study were, for the most part, self-reported data from the study subjects. As such, that data may have been subjected to bias caused by the structure of the questionnaire, personal filters, and the sincerity of the respondents' answers. Additionally, the data was obtained from managers within a single Federal agency. The conclusions reached from analysis of that data may only be transferable to other Federal agencies with similar missions and organizational structures. The rate of response to the questionnaire may have limited the statistical analyses that were performed.

Definition of Terms

Adult Education/Government-sponsored Training. The training addressed in this study is that which is directly related to the current or projected job. For this study, government-sponsored training is considered to be a category of adult education. This is also referred to in this study as simply "training." This definition excludes that realm of adult education dealing with community, religious, leisure and other activities not directly related to the work environment.

Managers and Supervisors. Personnel who are performing in a managerial or supervisory position, in the grade of GS-15.

Participation. For the purpose of this study (examining motivation), participation is defined as either the desire to volunteer for and sign-up for a training program or course or the actual act of volunteering and signing-up for a training program or course. Course completion is not necessary to constitute participation for this study.

Personal reasons. These are the influences over which the individual has some control or choice. Some examples might be personal goals established by the individual, marital status, and participation in civic or social activities.

Organizational reasons. These are the influences over which managers and supervisors exercise control. Some examples are tangible and intangible incentives and rewards, job requirements, and attitude toward allowing time off for training.

Environmental reasons. These are the influences that are outside of personal and organizational control and probably cannot be changed in the short term. Examples are the state of repair of the educational facility, availability of parking, and the ease of getting to the training site.

Scope and Delimitations

There are many different types of adult education, and each may have a unique clientele. Each type of adult education may have a specific set of characteristics, and each set of students may have specific needs that define why they may or may not want to participate in professional development activities. For this study, the researcher isolated one particular group of subjects-- managers of the Federal Emergency Management Agency, and one particular type of adult

education--government-sponsored training. This was intentional and was intended to fill a void in the research by concentrating on a specific segment of the adult population and particular type of adult education that has not been previously studied in depth.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents a review of the literature relevant to adult education participation.

The chapter is divided into the four sections described below.

- **Participation research:** presents an overview of adult education participation studies.
- **Participation models and theories:** presents a summary of some of the better known models and theories of adult education participation.
- **Methodology and instrumentation:** presents selected methods and survey instruments that have been used to derive empirical data concerning adult education participation.
- **Framework for this study:** describes how the previous studies, theories, and methodology have framed this study.

Participation Research

There have generally been two paths of inquiry in adult education participation research. One focuses on the identification of the characteristics of those who participated in adult education offerings. This research was described by Pryor (1989) as descriptive. The second path of inquiry is what Pryor (1989) calls explanatory and attempts to explain why people do or do not participate in adult education. Some studies combined these two paths of inquiry and sought to determine the *who, how many, and why* of adult education participation.

The descriptive path. The descriptive path of inquiry focused on who participated and how much. Researchers attempted to determine the numbers of adult education participants and the relationship between participation in adult education and characteristics such as age, gender,

socio-economic status, occupation, race, and previous level of education. Long (1987) provides a summary of adult education participation research that is rife with statistics concerning how many adults attended adult education activities (over 21 million), what the predominant age groups were (25 to 34-year-olds), which were the predominant race and gender (white females), and socio-economic status of participants (higher income equals higher participation). Long (1987) laments, however, the difficulty in obtaining reliable data and identifying a common basis for comparing the various studies that had been conducted.

One of the difficulties Long (1987) encountered was the variety of definitions of *adults* and *adult education* used by researchers. For example, in 1969, a study sponsored by the National Opinion Research Center in Chicago and conducted by Johnstone and Rivera (1965), defined adults as persons twenty-one years or older, married, or head of a household. Adult education included full-time students, part-time participants in adult education, and participants in independent programs (Johnstone & Rivera, 1965). In contrast, the National Center for Educational Statistics (NCES) conducted participation studies triennially from 1969 through 1984, and defined adults as any person 17 year of age or older. In their definition of adult education, the NCES specifically excluded courses taken by full-time students leading to a high-school diploma or academic degree and occupational training programs of six months or more duration (Long, 1987). By 1984, the NCES had expanded its definitions to “any course or educational activity taken part-time and reported as adult education by respondents seventeen years old and over” (Caffarella & Merriam, 1991, p. 65), but continued to exclude full-time students.

Three other national studies of adult education participation point out the wide focus and disparity of participation rates such descriptive studies can take. The Commission on Nontraditional Study, founded in 1971, examined the participation of a random sample of people between the ages of 18 and 60 who were not full-time students to determine if they had participated in an adult education activity through classes, courses, on-the-job training, private lessons, television, or self-instruction within the last 12 months. The study yielded a participation rate of 33 percent. A second study conducted by Penland (1979) was based on Tough's findings that a significant number of adults are engaged in some type of self-directed learning. Thus, the range of adult education activities was almost limitless. This study yielded a participation rate of nearly 80 percent for a population of those 18 years and older. A third study, sponsored by the College Entrance Examination Board and conducted by Aslanian and Brickell (1980) examined a sample of 1,519 adults over 25 years of age and yielded a participation rate of 49 percent.

A heightened awareness of education as a life-long process made adult education a major policy issue at the beginning of the 1980s (Anderson & Darkenwald, 1979). Anderson and Darkenwald conducted a study that addressed the patterns of participation in adult education based on the premise that "the social and institutional forces that affect equality of educational opportunity for adult students are very different from those that affect young people" (Anderson & Darkenwald, 1979, p. 10). A major difference between educational programs for children and adults is that adult education is generally voluntary. Participation by adults is a matter of choices.

Of interest in this study was how social and institutional factors affected the choices made by adults concerning participation in adult education programs. The purpose of the study was to determine the independent effects of such factors as age, race, income, and amount of formal schooling on participation and how those effects might lead to policy changes to increase opportunities for life-long learning, particularly among disadvantaged groups. Disadvantaged groups were identified in the study as women in the labor force, older adults, socioeconomically poor, and unemployed adults.

According to Anderson and Darkenwald (1979), there were several characteristics that distinguished their study from previous participation studies. Paraphrased, these were:

- The powerful tool of multiple regression was used to clarify complex interrelationships.
- The analysis was applied to the total adult population and to the subgroups cited above.
- A comprehensive, reliable, and current data base was used.
- The study examined persistence and satisfaction as part of participation.
- The research was designed to meet the needs of decision makers, policy analysts, and researchers.

The data base used for this study was provided by the United States Bureau of the Census for the National Center for Education Statistics. The data were collected in 1979 from a sample of 79,631 people 17 years of age or older who were not full-time students. Of the total sample, 9,173 were identified as participants in some form of adult education.

The Anderson and Darkenwald (1979) study produced the findings presented below relative to participation in adult education. These results were obtained using multiple regression techniques. Therefore, what may appear on the surface to have an effect on participation, when singled out in a multiple regression, may have little effect.

1. The factor that most powerfully predicts participation in adult education is the amount of formal schooling. Educational achievement influences participation independent of other socioeconomic factors such as income and occupation.
2. The second most powerful predictor of participation in adult education is age. That is, younger adults are more likely to participate than are older adults. Statistically, the effects of age are independent of other socioeconomic variables.
3. Family income has little effect on participation in adult education. Participation is effected by other factors related to low income, such as low educational attainment.
4. Similarly, black racial status has little effect on participation. When the factors associated with race that have an effect, particularly the factor of educational attainment, are controlled, black adults are slightly more likely to participate than are non-blacks.
5. Female gender is not a factor in participation. With other factors associated with gender controlled, women are slightly more likely to participate in adult education.
6. Not surprisingly, access or proximity to providers of adult education directly effects participation.
7. Eligibility for education entitlements has a small but positive effect on participation.

Even though Anderson and Darkenwald (1979) used a relatively large sample, only 10 percent of the variance associated with participation was accounted for statistically. Thus, 90

percent of whatever caused adults to participate was not identified by this or similar studies. The sociodemographic variables identified by Anderson and Darkenwald in this study were of modest impact on participation. They concluded that “people who participate in adult education are not on the whole much different from people who do not participate” (Anderson & Darkenwald, 1979, p. 16).

This Anderson and Darkenwald study produced two findings that the authors deemed new and significant. The first was that the type of employment--the work setting--had a significant independent effect on participation in adult education. The second was the strong impact on participation that veterans’ educational benefits had on participation.

The authors contend that further research is required and should address personal and situational variables such as attitudes toward education, awareness of opportunities, and life changes. The rationale for such research is embodied in their statement, “Yet without a better understanding of why people participate or do not participate...there is little prospect for identifying ways to enhance access to adult education” (Anderson & Darkenwald, 1979, p. 17).

Despite the uniqueness of each descriptive study, several characteristics of adult education participants have endured throughout the years. These participants are more likely to be women, to be younger, to have higher educational attainment, to have higher average incomes, and to be employed in white-collar jobs, (Long, 1987; Caffarella & Merriam, 1991; Courtney, 1992).

The explanatory path. The explanatory path of inquiry has, over the years, become more and more complex, as researchers have discovered an increasing number of influences on

the decision to participate or not participate in adult education activities. Several of the early studies cited above also sought to determine motivation for participation.

The Johnstone and Rivera (1965) study requested the subjects to select from a list of eight suggested ways in which they hoped the adult education activity in which they participated would be helpful to them. It was determined that job-related aspirations were the most frequently cited motivation. The Commission on Nontraditional Study expanded the prepared list of reasons from eight to twenty and obtained nearly the same results as Johnstone and Rivera (1965). The NCES triennial surveys took a slightly different approach and asked the subjects to select the main reason for participation. Not surprisingly, job-related reasons were the most frequently cited.

Cyril Houle's 1961 study proved to be a benchmark study concerned with the motivational orientations of adult education participants. After interviewing twenty-two participants, Houle concluded that adult education participants tended toward three motivational orientations: goal oriented, learning oriented, and activity oriented. Those participants who were goal oriented participated in adult education programs to achieve a goal they, or someone else, had set for them. In most cases this would be the completion of a course or a program. Those who were learning oriented, participated in order to learn about a particular subject or program area. Those who were activity oriented, participated for the social interaction that ensued during course or program sessions. Most early studies, from 1931 to 1963, indicated that the primary motivation for participation in adult education was a desire to advance economically (Courtney, 1992).

Houle's (1961) work stimulated subsequent studies by other researchers who sought to expand upon his typology. Perhaps the most devout in attempting to verify Houle's typology was Roger Boshier. Boshier (1971) developed and administered a 48-item *Education Participation Scale* to 233 adult education participants in New Zealand. The respondents were asked to rate each item on a scale of 1 through 9, concerning how much influence each item had on the decision to participate in adult education. Through rigorous multiple regression techniques, Boshier concluded that most, if not all, adult education participants are goal oriented. They decided to participate in organized adult education activities either because of a desire to grow beyond their present state or because of a need to remedy a deficiency. Boshier concluded that "participation is shown to stem from motives more complex than those originally identified by Houle" (Boshier, 1971, p. 3). In follow-up studies, Boshier (1976, 1977) and Boshier and Collins (1985) continued to examine Houle's typology and attempted to verify its applicability to a changing and more sophisticated world.

Morstain and Smart (1974), using the *Education Participation Scale* in a cross-cultural and group environment, conducted a study with a dual objective. The first was to replicate the study Boshier conducted of adult learners in New Zealand using a sample of adult learners who were participating in adult education in the United States. The purpose of this objective was to identify any similarities between the *Education Participation Scale* factor patterns of motivation when viewed in a cross-cultural context. The second objective was to determine significant differences in the motivations for participation in adult education when the adult learners were categorized into different groups by age and by gender.

Morstain and Smart (1974) administered the *Education Participation Scale* to approximately 650 adults enrolled part-time at Glassboro State College. The students were asked to respond to the scale by indicating the degree of influence each item had on their decision to participate in part-time college work. Based on a factor analysis, each item was associated with a factor that characterized the aggregate meaning of the items included in that factor. Six factors were obtained from the analysis.

- The first factor was “social relationships.” This factor is manifested in the participant’s desire to develop or improve social relationships. Those who scored high on this factor demonstrated a need for personal association, group activity, making new friends, and being accepted by others.
- The second factor was “external expectations” and reflected the willingness of the participant to respond to suggestions or requirements from those with whom they associate. They seek to fulfill the expectations of others rather than their own intrinsic needs.
- The third factor is labeled “social welfare” and was characterized by a humanitarian concern. Those who scored high on this factor perceived their participation in adult education as preparation for community service-type work.
- Factor four was “professional advancement.” The items related to this factor indicated a concern for advancement within one’s profession, and those who scored high were job oriented. They see the product of their education as greater competence or higher status in their occupations.

- The fifth factor was “escape/stimulation,” and suggests a need to get away from a dull or boring environment. High scorers on this factor may have participated in adult education as relief from boredom or responsibilities.
- The sixth factor was “cognitive interest.” This factor reflected a desire to learn and an inquiring mind.

After establishing the six factors, Morstain and Smart focused on the relative amount of importance that was placed on each factor. For the entire sample, more importance was placed on the professional advancement and cognitive interest factors, and, to a lesser extent, the social welfare factor. Less importance was placed on the items related to external expectations, social relationships, and escape/stimulation. This pattern appeared similar across the age spectrum of the sample.

Further analysis revealed the importance of social relationships decreased with increasing age. External expectations appeared to be more important to men than to women. Women had higher scores on the cognitive interest factor than did men. Group scores for professional advancement and escape/stimulation showed little variation.

The relative importance of the factors described above was qualified in that “no single cluster of reasons appeared to have overriding importance for the entire group or any particular group of respondents in the sample” (Morstain & Smart, 1974, p. 91). The highest rated factor, professional advancement, had a score of 5.8, on a scale of 1 through 9.

When analyzed by gender, social relationships accounted for 88 percent of the variance between the women’s groups and was a defining factor for women in the study. For the men’s

groups, social relationships accounted for 61 percent and external expectations accounted for 31 percent of the variation.

Morstain and Smart concluded that the *Education Participation Scale* yielded similar factor patterns when viewed in a cross-cultural context. The social welfare and cognitive interest factors were identical to two of the factors identified by Boshier. Many other items on the scale were common to similar factors in both studies.

The results of the study “indicated that the importance of certain clusters of reasons for participation showed noticeable variation across different age-sex groupings of adult learners” (Morstain & Smart, 1974, p. 96.) Additionally, this study validated the utility of the *Education Participation Scale* to distinguish between groups of adult learners who have different purposes and motivations for participating in adult education. The sample used in the Morstain and Smart (1974) study may not have been representative of the larger population of adults engaged in educational endeavors.

An interest in why adults participate in adult education programs was linked to a corollary interest in why adults do not participate. The Johnstone and Rivera (1965) study and the 1972 Commission on Nontraditional Study found that lack of time and money were the two most frequently cited barriers to participation. Researchers began to cluster and characterize the complex reasons for nonparticipation. Johnstone and Rivera (1965) established two categories: external or situational, and internal or dispositional. Cross (1981b) established three categories: situational, relating to a person’s current circumstance; institutional, relating to practices and procedures beyond the person’s control; and dispositional, relating to a person’s attitudes.

Darkenwald and Valentine (1985) developed a scale of deterrents that revealed the structure of perceived barriers to participation. The Darkenwald and Valentine (1985) study examined the factors that deter the general public from participating in adult education programs. The objectives of the study were (1) to develop a generic form of the *Deterrents to Participation Scale* (DPS) to measure deterrents to participation in education among the general public; (2) to identify the factors that deter the general adult population from participating in adult education activities; and (3) to determine relationships between sociodemographic variables, e.g., age, gender, income, and the deterrent factors. The study identified adult education as “any organized learning activity for adults, including courses, workshops, seminars, and training programs offered by schools, colleges, and other organizations or community groups” (Darkenwald & Valentine, 1985, p. 178). The general adult population was defined as “all non-institutionalized persons, 16 or older, not enrolled full-time in a school, college, or other educational institution” (Darkenwald and Valentine, 1985, p. 179). The study yielded six factors, which are presented below.

1 -- Lack of confidence: direct and indirect sources of self-doubt; low academic self-esteem. This factor scored relatively low.

2 -- Lack of course relevance: lack of appropriateness between available learning opportunities and perceived needs and interests. This factor was given a middle to high level of importance.

3 -- Time constraints: includes “lack of time.” This factor was given greater importance than any other.

4 -- Low personal priority: lack of motivation or interest; low importance. This factor was rated marginal to low in importance.

5 -- Cost: includes both direct (tuition, materials, etc.) and indirect costs (child care, car fare, etc.). This factor was in the mid range of importance.

6 -- Personal problems: includes child care, family, and personal health problems. This factor had the widest range, from high to low.

In examining the sociodemographic variables, the researchers found that the correlations derived were what one would expect, therefore providing support for construct validity of the DPS. Factor 1, lack of confidence, was related to higher age and lower socioeconomic status. Factors 2 and 3, lack of course relevance and time constraints, are weakly or unrelated to the sociodemographic variables. Factor 4, low personal priority, was more important for men than women. Factor 5, cost, was a significantly higher deterrent to women. Factor 6, personal problems, was also a greater deterrent to women.

Darkenwald and Valentine (1985) concluded that different populations need modified or specially designed Deterrent Participation Scales. Sociodemographic variables were related to five of the six deterrent factors. Finally, the fact that most of the scores were low indicated the decision not to participate in adult education activities was due to a multiplicity of factors working together, rather than one or two individually. The researchers indicated that more work is required to establish the usefulness of the DPS factor structure. This must be done through replication of the study with different populations throughout the nation.

Participation studies have continued throughout the 1980's and 1990's, with much of the research being a replication of what has gone before. For example, Governanti (1980) studied

the motivational orientations of adults attending a comprehensive community college; Eatman (1992) examined the barriers to employee participation in company-sponsored education and training programs; and most recently, Fujita-Starck (1996) examined the applicability of the Education Participation Scale to classify students into distinct curricular groups.

In addition to trying to identify the characteristics of adult education participants and determine the reasons why adults do or do not participate in education activities, many researchers sought to identify or develop models and theories of adult education participation. The next section of this chapter will present a selection of models and theories relative to adult education participation.

Participation Models and Theories

The field of adult education may not yet have a comprehensive theory of participation. However, the field does have several disparate participation theories and models that attempt to explain the phenomenon of participation (Caffarella & Merriam, 1991). Most of the models presented in this chapter were selected because they, just as this study, are specifically focused on formal learning activities, not informal or self-directed learning.

Force-Field Analysis Model. Harry Miller (1967), motivated by the lack of a guiding framework or theory in previous participation studies, recognized that the field of educational research was not prepared to provide a universal theory of participation and thus not prepared to make predictions concerning future participation trends or propose ideas for increasing participation in adult education. Miller also recognized that if he did not pose some hypothetical relations among participation variables, survey data would be relatively meaningless. Thus,

Miller built his needs hierarchy theory around three theoretical constructs: Maslow's hierarchy of needs, Lewin's force field theory, and Warner and Gans' social class theories (Miller, 1967).

The needs hierarchy theory is structured around Lewin's construct of equilibrium. That is, abstractions such as participation can result from the decisions made by individuals based on the weight of positive and negative psychological and situational forces (Miller, 1967). Miller then developed his hypothesis that the desire to participate in adult education can be the result of personal need and social forces.

Miller selected Maslow's hierarchy as the vehicle for explaining personal need. Miller selected Maslow's hierarchy because, unlike other theorists, Maslow arranged the human needs in a hierarchy and stated that one cannot achieve a higher need until the subordinate needs had been attained. From lowest to highest, Maslow's hierarchy is: survival, safety, belonging, recognition, achievement, and self-realization.

Survival ranges from a need for food to the gaining of marketable skills. Safety usually falls into the economic area in the form of maintaining a job. Belonging deals with the associations humans crave. Recognition is the first of what Miller (1967) calls the "ego needs" (p. 5) and is usually achieved through status. Achievement in the technology age often is achieved by doing more work in a shorter period of time. Self-realization is rarely attained and is the drive that leads us to make ourselves the most we can be. All people have the potential to seek satisfaction at every level in the hierarchy given that the lower level needs are met and social forces permit and encourage meeting the need.

Stating that personal needs are not met in a vacuum, Miller introduced another component of his analysis called social structures and forces. Maslow's hierarchy is shaped by

these social forces. Thus, what may be a survival need for one individual or group may not be so for another. The social variables Miller considered are social class value systems, technological change, and associational structures. His analysis focused on social class values. He separated the social classes into lower-lower class, working class, lower-middle class, and upper-middle class.

The lower-lower class are hostile toward education. Their basic class values are based upon an action and excitement orientation caused by an unstable family life, a belief in luck and fate, and a primary interest only in the present. Education is inimical because it requires members of this class to be willing to give up immediate reward for future gain. Clearly the lower-lower class is concerned with the lowest level of need on Maslow's hierarchy.

The working class is also action-oriented, however this translates into a quest for employment and a life where the dominant values are economic security and group loyalty. The working class value system supports education, but that education must hold some promise of a tangible reward such as a better job or a salary increase. The working class falls into the safety and belonging levels on Maslow's hierarchy. The safety need is a strong motivator for participation in education. This is particularly true in a world of rapid technological change wherein the working class recognizes that job security means willingness to change jobs and learn new skills. The belonging need, on the other hand, often restrains working class participation in education. Group loyalty, predominantly to the union and the church, often isolates the working class from the mainstream of society, which is middle class.

According to Miller (1967), "the lower-middle class value system, with its emphasis on mobility and status and a concentration on satisfying belonging needs within the nuclear family

rather than in the adult peer group, makes it a prime consumer of continuing education” (p. 11).

Education is seen as a means of achieving status. Because the quest for status may never end, the education required for this status may also be continuing. Thus, the social forces of the lower-middle class promote participation. The class’ status needs mesh with technological progress, community status needs keep them involved in associations, and years of successful schooling have accustomed the members of this class to a perpetual education-reward cycle.

The upper-middle class shares the same emphasis on the nuclear family and the same general orientations as the lower-middle class. However, the upper-middle class devotion to career achievement goes beyond achieving status for status’ sake. A concern for self-development separates one from the family unit and moves personal and professional interests from community and local associations to national and international levels. A major characteristic of the upper-middle class is the emphasis placed on educating children for self-development and intellectual growth. The upper-middle class feels very comfortable with continuing education, and in many cases such education is paid for by corporations and institutions.

Miller (1967) hypothesized patterns of interaction between personal needs and social forces that generate decisions concerning participation. His initial assumptions were:

1. Strong personal needs and strong social forces should result in a high level of participation.
2. Strong personal needs and weak social forces should result in generally low participation, with erratic high spots.
3. Weak personal needs and strong social forces should result in high participation originally, with a sharp drop-off after an initial period.

4. When personal needs and social forces conflict, participation will depend upon the strength of the social forces.

Miller (1967) grouped the forces influencing participation in four major areas of adult education (vocational competence, personal and family competence, citizenship competence, self-development) for 4 social classes, showing how personal needs interact with external social forces. Two examples, derived from Miller's (1967) force-field analysis are shown in Figures 1 and 2. In Figure 1, the negative forces overpower the positive forces. In Figure 2, the opposite occurs.

<p>Positive Forces</p> <ol style="list-style-type: none"> 1. Survival needs 2. Changing technology 3. Safety needs of female culture 4. Governmental attempts to change opportunity structure 	<p>Negative Forces</p> <ol style="list-style-type: none"> 5. Action-excitement orientation of male culture 6. Hostility to education and to middle class object orientation 7. Relative absence of specific, immediate job opportunities at end of training 8. Limited access through organizational ties 9. Weak family structure
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Figure 1. Education for Vocational Competence--Lower-Lower Class. Source: Miller, 1967, p. 21.

<p>Positive Forces</p> <ol style="list-style-type: none"> 1. Satisfied survival need 2. Strong safety need 3. Social shift to white-collar and service jobs 4. Changing technology 5. Union pressures toward upgrading and presence of organizational access 6. Job stability 7. Practical orientation toward education 	<p>Negative Forces</p> <ol style="list-style-type: none"> 8. Fear of relinquishing belonging need satisfaction of peer group culture (weakness of mobility drives) 9. Hostility to middle class object-orientation
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Figure 2. Education for Vocational Competence--Working Class. Source: Miller, 1967, p. 22.

Congruency Model. Boshier (1973), as have several others, believed that motivation for participation was a function of the interaction between internal psychological factors and external

environmental factors. It was the congruence between these factors that determined the propensity for participation and persistence. Boshier (1973) contended that there were two motivational tracks: growth and deficiency. Those who were growth motivated had satisfied the basic needs described in Maslow’s hierarchy. They were, therefore, more confident and willing to try new endeavors. Those who were deficiency motivated were engaged in meeting their more basic needs and were more apt to respond to the associated social and environmental forces. The congruency model is depicted in Figure 3, and explained below.

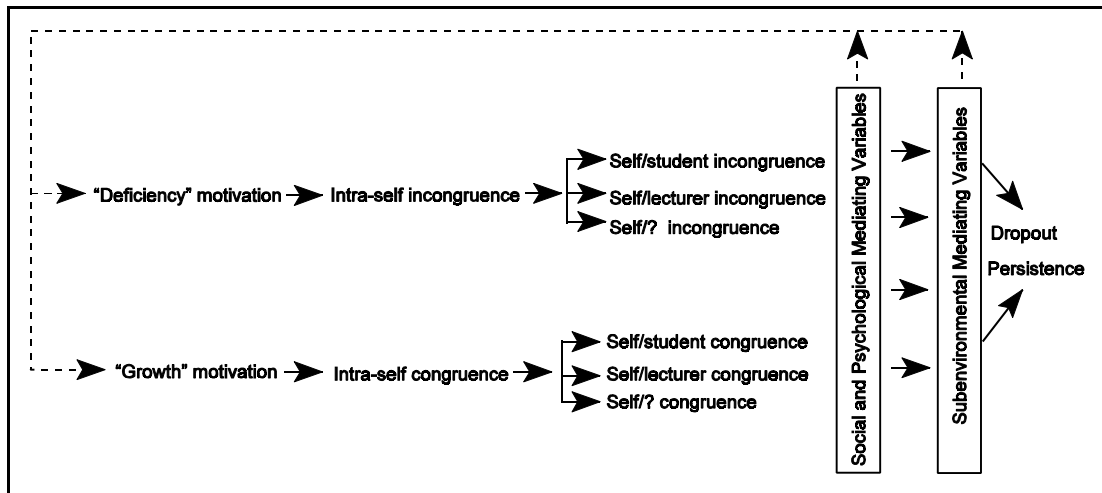


Figure 3. Boshier’s Congruency Model. Source: Boshier, 1977, p. 91.

Whether you start at the deficiency or growth motivation, Boshier (1973) posited that participation was a function of “the magnitude between the participant’s self-concept and key aspects of the educational environment” (p. 260). Intra-self is the difference between one’s self and one’s ideal self. This is followed by the perceived congruence or lack thereof between the self and the other students, teacher, and institutional environment. The cumulative effect is mediated by social and psychological variables, e.g., age, gender, socioeconomic status, and subenvironmental variables, e.g., ease of getting to class, physical comfort of the classroom. The

dotted lines are intended to indicate the mediating variables have had an effect on the individual from the beginning. The Congruency Model suggests two things. First, participation is explained by the interaction between internal and external motivating factors. Second, the “proper matching of adults to educational environments is important” (Cross, 1981a, p. 120).

Expectancy-Valence Model. In 1977, Kjell Rubenson prepared a paper for the Organization for Economic Cooperation and Development in which he proposed a model that he hoped would lead to a theory of recruitment (Cross, 1981a). The Expectancy-Valence Model is based on the perception of individual and environmental factors. The expectancy part of the model refers to the expectation of being successful in an educational activity and the expectation that such success will have a positive outcome. If either of these is zero, there is no motivation to participate. Valence refers to the value one puts on being successful, which could be positive, negative, or neutral. This factor is based on the anticipated consequences of participating and how participation might add or detract from other aspects of one’s life.

The Expectancy-Valence Model, which is depicted in Figure 4, has three key components: the individual’s perception of needs, the environment, and value of education; socialization of the individual; and the synergy of these two factors combined to determine motivation to participate (Cafarella & Merriam, 1991).

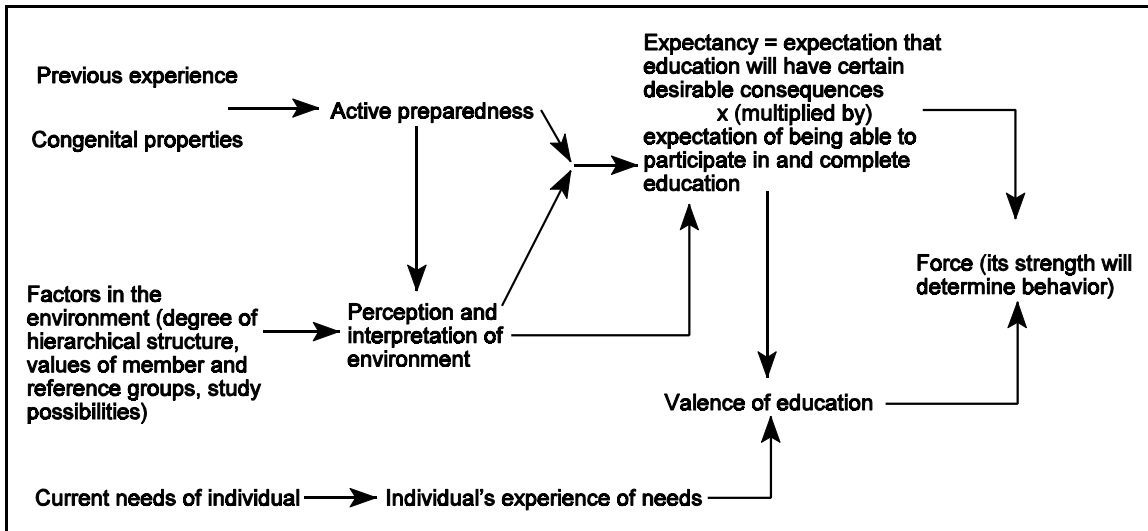


Figure 4. Expectancy-Valence Model. Source: Caffarella & Merriam, 1991, p. 235.

Chain of Response Model. Cross' (1981a) Chain of Response Model is a composite model that combines common elements of Miller's, Boshier's, and Rubenson's models. The Chain of Response Model comprises seven responses linked in a sequential chain, each of which if positively experienced will lead to participation. The model is depicted in Figure 5.

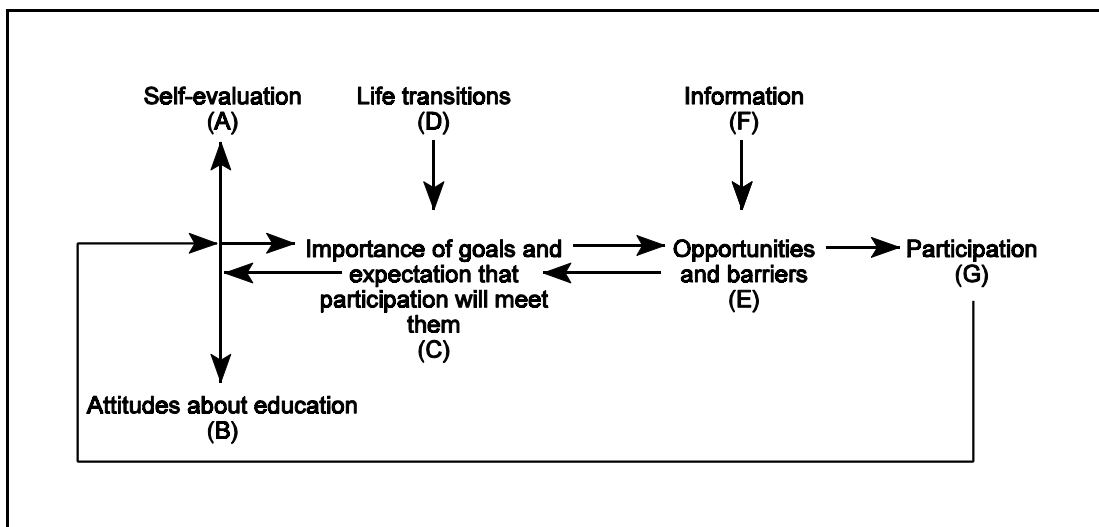


Figure 5. Chain of Response Model. Source: Cross, 1981a, p. 124.

Point A, self-evaluation, represents the individual's assessment concerning whether or not achievement in an education setting is possible. According to Cross (1981a) "research suggests that persons who lack confidence in their own abilities...avoid putting themselves to the test and are unlikely to volunteer for learning which might present a threat to their sense of self-esteem" (p. 125). Attitudes about education, point B, are a product of the individual's past experience, attitudes of friends and associates, and from influential reference groups. Cross (1981a) contends that points A and B are mutually supportive. That is, a positive self-image generally portends a positive attitude about education, and vice-versa. Point C is a direct reflection of the expectancy-valence concept proposed above.

The Chain of Response Model was the first to account for those events and changes that all adults encounter throughout their lives (Caffarella & Merriam, 1991), represented at point D in the model. Sudden or dramatic changes in life may bring to the front latent desires to participate in educational activities (Cross, 1981a). Opportunities and barriers, point E, are important environmental factors. A strong motivation to learn will prompt the exploration of new opportunities and overcome barriers; the opposite will also be true. Information, point F, is that which links the motivated learner to the available opportunities. "Without accurate information, point E in the model is weak because opportunities are not discovered and barriers loom large" (Cross, 1981a, p. 127). Although the environmental factors noted at point E are important, Cross (1981a) considers the psychological factors to be most important (Caffarella & Merriam, 1991; Cross, 1981a).

Psychosocial Interaction Model. Darkenwald and Merriam (1982) shifted the focus of participation from the individual's perceptions to environmental factors such as socio-economic

status, external stimuli, and barriers. Their Psychosocial Interaction Model is divided into two segments: preadulthood and adulthood, as show in Figure 6.

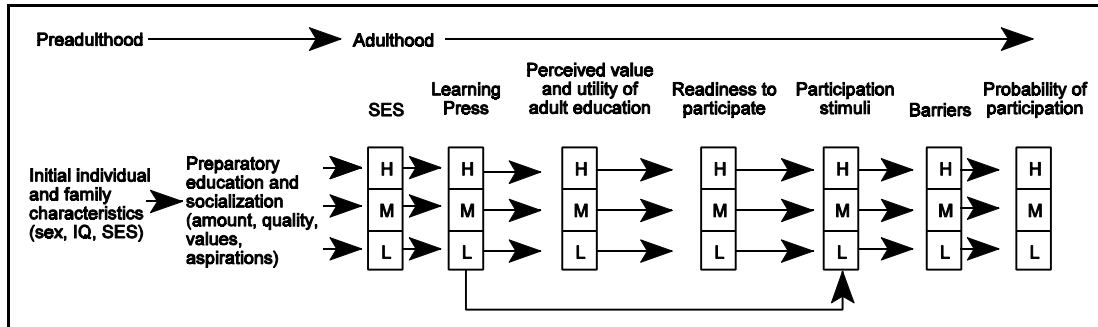


Figure 6. Psychosocial Interaction Model. Source: Darkenwald & Merriam, 1982, p. 143.

In the preadulthood phase, individual and family characteristics set the pattern for becoming an adult. Of particular importance and relevance is prior education, which is linked to social class and adult education participation (Darkenwald & Merriam, 1982).

The adulthood phase comprises six components, which can be rated as high, mid-level, or low. Socioeconomic status (SES) is considered first and is the dominant influence in the model. Related to SES is learning press. Darkenwald & Merriam (1982) define learning press as “the extent to which one’s total current environment requires or encourages further learning” (p. 142). Learning press will have an effect on the perceived value and utility of adult education. That is, if the current environment requires learning, the perceived value of education ought to be correspondingly high, and vice-versa. The perceived value and utility of education will consequently spawn a readiness to participate.

Darkenwald and Merriam (1982) contend that a readiness to participate must be “activated by one or more specific stimuli before participation can be expected to occur”

(p. 144). This stimuli can be external, such as a life transition event, or internal, such as a desire for self-improvement. The model indicates a direct relationship between the intensity of learning press and the frequency and intensity of participation stimuli. Finally, the motivation to participate may be inhibited by barriers such as lack of information, difficulty in enrolling, and lack of money. The magnitude of these barriers are usually inversely related to SES. Correspondingly, motivation to participate in adult education activities will be higher for those on the higher end of the SES scale.

ISSTAL model. In the spring of 1986, Cookson (1986) presented what he characterized as a comprehensive theoretical framework for the integration of theory and research on participation that had been accomplished to that point. He laments early in his work that the concept of participation in adult education had yet to be supported by a sound theory or an empirically tested base of knowledge. Most studies were atheoretical, descriptive (versus analytical), and limited to a few psychological or sociological factors. Additionally, these studies tended to replicate the design, questions asked, and findings of previous studies. Those studies that did delve into theoretical explanations tended to ignore previous studies and contained little, if any, empirical base.

Cookson, therefore, endeavored to put forth a “framework for theory and inquiry directed at understanding aspects of the human condition which influence an individual’s involvement in purposive learning activities” (Cookson, 1986, p. 130). The framework is based on an interdisciplinary model developed to explain and predict social participation. The model presumes that human behavior is somewhat predictable and can be determined by some identifiable and measurable characteristics of the person and the environment.

The social participation model which was the basis of Cookson's work is the *interdisciplinary, sequential-specificity, time-allocation, life-span* (ISSTAL) model. Cookson (1986) made the point that the ISSTAL model did not constitute a fully-developed theory, but was being used as a basis for further study and the development of an empirically-grounded theory of adult education participation. The model comprises one dependent variable -- adult education participation -- which is a result of the combined and interactive influence of six classes of independent antecedent variables: external context, social background and social roles, personality and intellectual capacity, attitudinal dispositions, retained information, and situational factors. The model is depicted graphically in Figure 7.

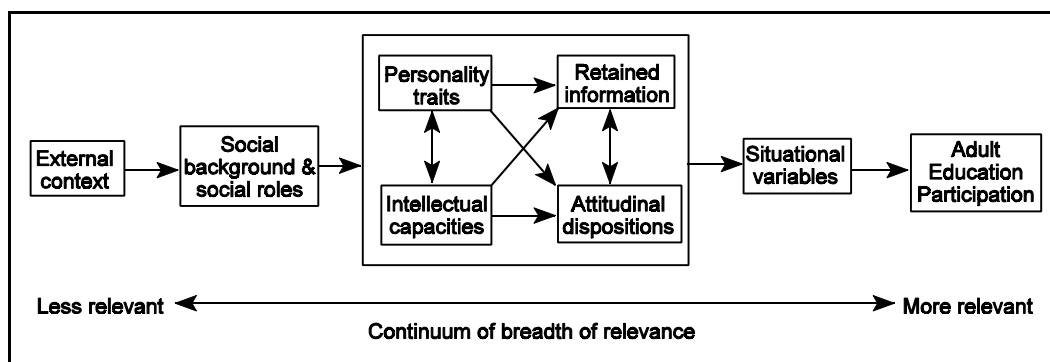


Figure 7. ISSTAL Model. Source: Cookson, 1986, p. 131.

There are three characteristics of the ISSTAL model, denoted by its name: (1) it has an interdisciplinary conceptual framework, (2) there is a sequential specificity of relations among the independent variables and between those variables and the dependent variable--adult education participation, and (3) there is a time allocation life span perspective (Cookson, 1986).

The interdisciplinary conceptual framework the author employs includes concepts and relationships from a number of areas, particularly physiology, anthropology, political science, sociology, psychology, and the discipline of adult education.

The sequential specificity of relations is manifested in the causal interconnection of the independent variables. Except for the situational variables, the independent variables exert most of their influence on participation in adult education through interaction with one or more of the other intervening variables. Thus, the farther left on the “breadth of relevance” continuum the variable lies, the more diluted its impact and the greater probability that effect will be influenced by subsequent variables.

The time allocation-life span perspective of the model was based on the finding that social participation tends to fit into life-long patterns. Thus, those who participate in social activities, including adult education, early in their lives will tend to continue that level of participation in their later years. The opposite was also postulated--a low participation level early in life will tend to remain low in future years.

Cookson (1986) leaves the characterization of the dependent variable, adult education participation, to the reader. He states that previous definitions have included both formal and informal education activities and independent studies. Additionally, he states that participation has been loosely defined in several ways: participants/non-participants or participants/non-participants/would-be participants. The author implies that a clear definition of adult education participation can be left to the reader because regardless of that definition, the dependent variable will still be a consequent of the six classes of independent variables.

The first class of independent variables are those pertaining to *external contextual* factors. These factors refer to those over which the individual probably has had little control but which have contributed to the development of the individual’s personality and social background. Examples of external contextual factors might be climate, topography, and population density.

Cookson states that these types of variables, particularly the effects of culture and social structure “have been largely ignored in the adult education literature” (Cookson, 1986, p. 133).

The second class of variables used in the ISSTAL model, *social background and social role* factors, comprises five types of social characteristics: physical and physiological features; ascribed social positions and roles; voluntary or achieved social positions and roles; experience and activity history; and resources, possessions, and access to resources. Cookson (1986) discusses each of these in detail:

-- Physical and physiological features: The most commonly cited factor is age. The author attacks the notion that age is inversely related to participation, claiming that such findings may be an artifact of faulty sampling and analysis. He contends that longitudinal studies may be the only way to justify an age-related finding.

-- Ascribed social positions and roles: The most powerful predictor of participation in this category has been observed to be formal educational attainment. The author claims that most studies have unjustly reduced other social role variables to insignificance.

-- Voluntary or achieved social positions and roles: The author states that there have been no empirical tests of how these variables effect participation. He does cite findings that certain imperatives of the job structure may mediate the influence of other variables such as educational attainment. Job conditions have also been shown to effect psychological functioning, participation in organized voluntary action, and leisure time activities.

-- Experience and activity history: The author states that the impact of unique personal experience had yet to be thoroughly examined. However, he then goes on to cite two studies that

found life transitions such as job changes, marriage, arrival of a child, and retirement preceded decisions to participate in adult education.

-- Resources, possessions, and access to resources: Income has generally been used as the measure for this category. The author suggests that other measures may be available to broaden this category but does not state what those measures might be.

The third class of variables used in the model, *personality and intellectual capacity* factors, concern themselves with the individual's psyche that probably endure over time and circumstances. These are somewhat permanent "dispositions of individuals to think, feel, want, and act in certain ways and not in others, depending on the circumstances" (Cookson, 1986, p. 135). The only reference made to intellectual capacity, as measured by intelligence test scores, is that such capacities appear to be related to completion rates of adult basic education participants (Cookson, 1986).

Class IV variables, *attitudinal dispositions*, are less enduring and do not cross situational lines as do the those in Class III. This class of variables consists of values, attitudes, expectations, and intentions. Values are defined as the motivational dispositions that apply across different situations. These were further broken into terminal values--where one would like to wind up, and intermediate values--how one gets there. Attitudes refer to how a person will respond to specific situations. Cookson (1986) states that attitudes are dependent upon what people believe about the outcomes of participating and how much value they place on those outcomes. The intention to participate appears to be an interaction among attitude, perception of significant others, and motivation to comply with one's own beliefs about whether or not to participate. Expectations are more closely related to the immediate situation, but do include what

a person believes about the likelihood of how participation will effect future events. A positive expectancy about completing an adult education activity and the associated results will enhance participation. Intentions refer to the will to act and appear most closely related to educational interests.

The fifth class of variables in the ISSTAL model , *retained information*, consists of the growing array of information stored in the mind in the form of images, beliefs, knowledge, and plans. Knowledge refers to the beliefs that an individual thinks are true and correspond to reality. According to Cookson (1986), the only variable in this class that has been studied in relation to participation in adult education was knowledge as it denoted awareness of education programs.

The variables in Class VI, *situational variables*, exert the most immediate effects on participation in adult education. A definition of the situation is “the end result of the cognitive process whereby an individual takes in sensations and perceptions or remembers stored information, puts it all together, and makes holistic sense of what is currently happening” (Cookson, 1986, p. 138). Another characteristic of this class is the relative amount of personal, physical, mental, and emotional energy individuals perceive to be available for participation.

The article touts the ISSTAL model as a “comprehensive interdisciplinary explanatory and predictive scheme and a behavioral analogue of the multiple forms of social participation” (Cookson, 1986, p. 139). This quotation implies that a significant portion of the ISSTAL model is based on studies of participation in social activities other than adult education. Throughout the article is the suggestion that what worked for social participation in general ought to work for participation in adult education, another form of social behavior. Cookson (1986) claims the ISSTAL model is significant to the field for three reasons. First, “it provides a conceptual

scheme for the integration of currently separate, disparate, and discipline-bound theoretical explanations and research findings” (Cookson, 1986, p. 139). In this regard, the ISSTAL model provides for the transfer of findings gained in other social participation studies to research in adult education participation.

Second, “the model highlights the importance of examining adult education participation in relation to other forms of individual discretionary behavior, the differential patterns of adult education participation across the life cycle, and various psychological, sociological, and macro-societal factors” (Cookson, 1986, p. 139).

Third, “with respect to its practical significance for adult education practitioners (counselors, instructors, and program planners), the ISSTAL model suggests some points for intervention in order to increase the probability of program participation” (Cookson, 1986, p. 139). Perhaps participation could be enhanced by changing occupational conditions, beliefs and knowledge about the available programs and the benefits of participating in those programs, and the characteristics of the programs that cause negative feelings.

Summary. There are common themes running through the theories presented in this section. Not in any order of importance, but first, participation appears to be based upon the interaction between an individual and his or her environment. Second, participation is related to a person’s position on Maslow’s hierarchy. Third, participation is directly related to self-esteem. Fourth, there is an assumption that individuals have some control over their lives.

The value of these models is captured by Cafarella and Merriam (1991):

...they do constitute a contribution to the literature on participation in that they attempt to map the interaction of variables that have been shown to influence a person’s decision to

participate and subsequent perseverance in the activity. While the interaction is conceptualized in diverse ways in the different models, the models can help educators and others to become aware of the importance of certain factors in the explanation of participation--factors perhaps not noticed previously--and appreciate the vexing complexity of the phenomenon itself (p. 247).

Although Cafarella and Merriam (1991) claim the models have not been tested, several adult education researchers have used empirical methods to test selected models and theories. The next section of this chapter discusses some of the methodology used.

Methodology and Instrumentation

In this section, a technical review of participation research methodology is presented. This is followed by a description of two of the most notable and widely used instruments, along with discussions of how they were used in participation research.

Boshier reviews participation studies. Boshier (1976) published a review of fourteen participation studies conducted over a fifteen year period. His primary focus in the critical review was the method employed by the researchers to measure adult education participants' motivation. The review was centered on studies that stemmed from Houle's typology and that used either the *Education Participation Scale (EPS)*, the *Reasons for Educational Participation Scale (REP)*, or the *Continuing Learning Orientation Index (CLOI)*. Nine of the studies were a product of doctoral research, three as Master's theses, and two as general research reports.

In most of the studies, the researchers used the survey instruments to identify factors effecting participation in adult education. Using factor analysis techniques, instrument items were usually grouped into clusters, or factors, which the researchers claimed to be similar to

those developed by Houle (Boshier, 1976). The researchers then used factor scoring to determine the degree of influence each item had within its cluster. In many of the studies, an analysis of the relationship between the factor scores and socio-demographic variables was then conducted.

Boshier prescribes a set of four characteristics that should be present for such studies to be technically correct. These characteristics are stated verbatim below (Boshier, 1976, p. 26).

1. The problem investigated should be anchored in a sound and parsimonious theory or model.
2. The criteria for factoring and factor scoring should be fully described and justified to a point where replication by a “naive” researcher is possible.
3. There should be no carelessness or unwarranted addition or deletion of items from instruments.
4. Instruments should be subject to test-retest reliability and validity procedures.

Boshier claimed that much of the participation research he reviewed lacked one or more of the characteristics required for an effective study. The most grievous faults were not enough information provided to enable replication of the study, a lack of reliability information, and failure to understand criteria for rotation. Although many studies used similar instruments to obtain participation factors, results were widely different due to the use of different criteria for generating factor matrices and factor scores (Boshier, 1976). Taking a non-statistical view, Boshier also expressed concern that the studies he reviewed were based on Houle’s typology, which may not accurately reflect the motivation for participation in adult education.

Boshier’s review was based on an analysis of the statistical procedures used in the studies. He admonished researchers using computer-generated scores to be aware of the

statistical processes employed by their software. Often, the researchers did not know what criteria the computer used to generate factor scores or whether the factor scores were normalized. Also, the difference between factor structure and factor scoring was addressed.

Factor structure relates to the formation of clusters, while factor scoring shows the extent to which the respondents participate in adult education. If items with similar content or meaning are placed in a correlation matrix, they will, more than likely, cluster together. When this happens, some researchers have erroneously claimed to have discovered a new factor. Factor scoring determines if any of the items actually represent a motivation for participation. It is possible, for example, that a group of items could cluster together if the item scores were all at or close to zero. This would indicate a cluster had formed, but the influence the items in the cluster had on participation would be insignificant.

Another caution put forth by Boshier (1976) was in naming the factors that emerge during analysis. The example he used was grouping items under a factor named “learning orientation,” when in reality the factors dealt with motivation. There was no evidence to indicate that the items were related to learning at all. Factor names should simply try to capture the central theme of the items in the factor. Boshier considers motivational orientations as little more than descriptive concepts which can only be explained when tested using classical scientific techniques.

Boshier’s technical review also uncovered a misinterpretation of the near-normal distribution of the factor scores. He concluded that while common sense would dictate that not all respondents would be motivated to participate to the same degree, researchers tend to produce normalized factor scores, where the mean and standard deviation are the same for each factor.

The fact that these scores were normally distributed was not a true research finding, but a vagary of the method used to generate factor scores.

Boshier (1976) addressed the issue of instrument scaling in his study. He pointed out that the *Education Participation Scale* was keyed so that for some items the highest rating was on the right and sometimes on the left. The other scales used did not make this attempt to alleviate response bias. Additionally, the wording of the scale descriptors can effect the interpretation placed by the respondent. Boshier cites the example of the word “important” versus “influence” in assessing motivation to participate, stating that “important” elicits a socially desirable response, while “influence” elicits an internal motivational response. Concerning how many educational activities the respondent should be asked to consider, Boshier stated “most research projects are better served by the measurement of precise and immediate motives pertaining to the most recent (or present) activity” (Boshier, 1976, p. 35). For all three instruments, EPS, REP, and CLOI, care was taken to eliminate what Boshier called passenger items. These are test items that fail to load significantly on any factor. Through this winnowing process, all instruments were reduced in length.

Boshier provides some research philosophy in his conclusion: “The attitude adopted for this review stems from the belief that science is a cumulative process; each new study should improve on what went before. Because the earlier studies were conducted at a time when researchers were less aware than at present of artifacts and variables which confound measurement, this does not in any way diminish their importance. They were an essential part of the cumulative research process...” (Boshier, 1976, p. 43).

Deterrents to participation. As described above, the *Deterrents to Participation Scale* (DPS) was used to determine the barriers to participation among the general public. Scanlan and Darkenwald (1984) had developed the DPS as an instrument to identify the deterrents to participation in education by a sample of nurses. For Darkenwald and Valentine (1985) to sample the general public, a new DPS had to be developed and tested. Information on deterrents was obtained through interviews with a diverse group of 72 adults. Assembling the list of deterrents in random order resulted in a prototype DPS. A different diverse group of 117 adults took the prototype. Results were analyzed, content and construct validity checks were conducted, and a final DPS with 34 items was developed. The DPS was sent to a random sample of 2000 homes in Somerset, New Jersey. Those subjects who responded ranged in age from 18 to 76, with a mean age of 42.6; most were females; educational attainment was high, as was family income. The researchers considered the sample to be homogeneous, even though Somerset County is one of the wealthiest in the United States.

A 6-factor solution was selected as the most meaningful representation of the data and accounted for 53% of the scale variance. The researchers believed no adequate theoretical base existed for predicting the factor structure of the deterrent items, so they used exploratory factor analytic procedures. To identify the initial factors, the researchers used a principal components analysis. For the final analysis, the researchers used orthogonal rotation with Varimax procedures.

Houle's typology--twenty years later. More than twenty years after Houle developed his typology, Boshier and Collins (1985) conducted a large-scale study to re-examine how well Houle's typology summarized the participants' motivational orientations. At the beginning of

their study, the researchers noted that Houle did not fully explain why he had chosen three types of learners. Houle simply stated “as I pondered the cases, considering each one as a whole, it gradually became clear (after many an earlier analysis had led nowhere) that within the group there were in essence three subgroups” (Boshier & Collins, 1985, p. 114). Houle had made no attempt at a quantitative test of his typology. However, other researchers were inspired to do so.

Two students at the University of Chicago, Sheffield and Burgess, compiled lists of reasons given by adults who participated in adult education programs and compiled these reasons into questionnaires. Sheffield administered his questionnaire to 453 participants in 20 continuing education programs. His analysis yielded five, rather than three factors. Burgess administered his questionnaire to 1,046 participants in the St. Louis, Missouri, area. His analysis developed fifteen factors but was flawed through misinterpretation of the results. Burgess stated that the scores he obtained were normally distributed. He did not realize or acknowledge that this distribution was simply an artifact of the computer program he used for analysis. This mistake is important in that much of what Houle subsequently wrote was based on Burgess’ work.

Using the *Education Participation Scale* developed earlier, Boshier (1973 and 1976) and Boshier and Collins (1985) conducted several tests on large samples of participants. These tests neither corroborated nor denied the efficacy of Houle’s typology. Boshier and Collins (1985) did identify two branches of participation research. The first, along the lines of Houle, was concerned with the structure of motivation orientations; that is, the number of factors or clusters (typology) into which the motivations might fit. The second concerned itself with “the functional relationships between motivational orientation scores and their antecedents and consequents” (Boshier & Collins, 1985, p. 116). The preponderance of research had been within the second

branch. Most researchers used the EPS to develop orientation scores to be used in regression or other types of analyses. Over 80 students had used the EPS in their master's or doctoral research and approximately 60,000 participants had completed some form of the EPS (Boshier & Collins, 1985).

The Boshier and Collins (1985) study tested Houle's three-factor typology by analyzing the structure of an EPS correlation matrix containing data from a wide variety of adult education participants in a wide variety of settings from 1968 through 1982. The researchers justified using existing data as a savings of time and money, as an expansion of the types and number of participants and settings, and as a demonstration of how theory and empirical relationships are effected by time and culture.

The researchers sent letters to those whom they knew had used the EPS requesting their data be submitted for a secondary analysis. The researchers used fifty-four files (studies), which constituted a master file of 13,442 cases, in the analysis. Because several versions of the EPS had evolved, the different versions had to be transformed to a common format and scale. Code books were also requested to decipher demographic data.

Because the purpose of the Boshier and Collins (1985) study was to analyze the three-cluster resolution of the correlation matrix, cluster analysis was selected as the method to analyze the data. According the authors, cluster analysis was employed for this study because:

1. By definition, factor analysis does not permit factors to intercorrelate. Thus factorial approaches would have obscured the purpose of this study.

2. Cluster analysis can describe the structure among intercorrelated clusters, unlike factor analysis which yields ambiguous results when items are all highly intercorrelated.
3. Cluster analysis affords a pictorial 'tree' which is easily understood by practitioners not familiar with eigenvalues, rotations or the other paraphernalia of factor analysis.
4. A cluster tree of aggregated correlations is more parsimonious than factor analyses where, during rotation and factor score computations, the loadings become more remote and abstracted from the original raw data. (Boshier & Collins, 1985, p. 122)

Cluster analysis is a stepwise process that measures the similarity among items. In the first step, each variable was considered to be a single cluster. In the second step, the two items that were most similar formed a two-item cluster. This bonding continued until all items had been analyzed and joined, and one single cluster remained. The researchers then examined the results to determine at what point the number of clusters was few enough to be understandable and large enough to provide adequate detail. For Boshier and Collins (1985), the measure of similarity was the absolute value of the correlation coefficient. A cluster's similarity was computed as the mean correlation among the items it contained. The clustering process showed the sequence and membership of items in the clusters as they formed. Two cluster analyses were performed. The first used the data from all 13,442 respondents; the second used the data from the 8,107 respondents who completed the newest, 40-item, version of the EPS.

The Boshier and Collins (1985) study determined the fit between Houle's three-factor typology and the motivational factors derived from a large number of participants in a variety of settings. According to the authors, "a three-cluster solution loosely isomorphic with Houle's typology was discernable" (Boshier & Collins, 1985, p. 125). The use of the word *loosely* leads us to believe the researchers may have been trying to be kind in portraying results that did not substantiate the typology. Remember, however, that Houle stated that the three categories were not independent or pure but could best be represented pictorially by three circles overlapping at the edges (Boshier & Collins, 1985).

According to Boshier and Collins (1985) their study was important because it provided a baseline for future empirical tests of Houle's typology. This study provided norms derived from large data sets with which EPS users can compare their results. The soundness of this study lies in the large data set obtained from a large variety of participants in a wide variety of adult education settings.

Boshier and Collins (1985) suggested several paths for future research. These include using the EPS scores to predict the consequences that flow from participation in adult education, using case studies to compare high and low EPS scores, comparing EPS scores with student performance, examining how initial motivation orientations impacted behavior and learning, and examining how motivational orientations change during the course of an adult's life. Boshier's work with the EPS continued into the 1990s as he modified and tested the scale with different audiences and by encouraging researchers to send him their data (Boshier, 1991).

Fujita-Starck (1996) investigated the factor stability and construct validity of the EPS in a study to determine if the EPS could be used with a diverse student body. A random sample of

students enrolled in noncredit continuing education courses at the University of Hawaii was administered the EPS. Demographic data included gender, age, race, and education level. Responses were received from 1,142 students. Principal components factor analysis was used to verify the stability and factor structure of the EPS. The factor loadings derived from the data supported a seven-factor structure.

This section addressed methodology and instrumentation for each pole of participation research--participation and non-participation, which have been tested and validated over time. Every adult education participation study conducted or theory developed this century could not be covered. Their omission is in no way meant to lessen their importance or relevance to the field.

Framework for This Study

The foregoing review of selected studies, models, methodology, and instrumentation helped to frame this study. The practical significance for conducting this study was suggested by Cookson (1986), in that the results could be provided to adult education practitioners to help increase program participation by changing occupational conditions, beliefs and knowledge about available programs, and the characteristics about programs that cause negative feelings.

The participation research studies discussed at the beginning of this chapter generally cast a wide net concerning the scope and types of adult education and the audience studied. From reviewing that research, this author discerned that there were two lines of inquiry. One was to answer the question of who participated in adult education activities, the second was to answer the question of why.

Concerning the *who*, there was little surprise with the findings that those who are of higher socioeconomic status, with a higher education level, who are relatively self-assured tend to continue their education and participate in adult education activities. This author wondered if the same applied to the government manager and supervisor. Concerning the *why*, the research became more complex.

Knowing the audience for this study would be a subset of the adult population at large and that the type of adult education to be addressed excluded the informal and self-directed activities, this author selected motivation models that were slightly restricted in their scope, in that they were primarily applicable to formal, structured adult education activities (Caffarella and Merriam, 1991).

The common threads among the models presented in this chapter lead this author to wonder if the interactions presented in the models would be applicable to the government supervisor, or were there different motives for wanting to attend training. As determined by Anderson and Darkenwald (1979), the work setting had a significant effect on participation in adult education activities. Additionally, this author sought to examine any relationship between the *who* and the *why*, that is, between the demographic variables and the motivation variables.

The methodology and instruments that could be used to answer the questions posed above were a natural fallout of the literature reviewed. That is, to compare the government supervisor's participation motivation with that of previous studies, replicate the studies that posed the same questions. The idea of scoring the individual questionnaire items in this study was derived from Boshier (1976), who indicated that researchers had used this technique to determine the degree of influence stated items had on their decision to participate. The DPS and EPS would provide the

data needed to examine the characteristics and participation motivation of government managers and supervisors. However, in the broader body of research, subjects were asked to think back to the last adult education activity in which they participated. In this study, subjects were asked to think back to a specific type of training. Additionally, as suggested by Cookson (1986), the instructions associated with the questionnaire addressed participants, non-participants, and would-be participants.

The following chapter, Chapter III--Method, discusses how the methodology and instruments presented above were adapted to this study.

CHAPTER III

METHOD

This chapter includes a description of the subjects of this study, the instrumentation and procedures for data collection, and the statistical methods that were be used for analysis to answer the research questions posed in Chapter I.

In this study, the researcher investigated the relative importance of the reasons why managers and supervisors in the Federal Emergency Management Agency (FEMA) participate or do not participate in government-sponsored training. Initially, a review of the literature on participation research yielded an array of reasons why adults do or do not participate in education activities. Once the reasons for participation and non-participation had been derived from the literature, they were presented to the study subjects in a questionnaire. The subjects were asked to assess the influence each reason had on their decision to participate or not to participate in training. The demographic variables of age, gender, level of education, geographic assignment location, and family income level also were examined to determine their relationship to participation and non-participation motivation.

Subjects

The subjects for this study were government employees assigned to managerial and supervisory positions in the Federal Emergency Management Agency Headquarters in Washington, D.C.; the National Emergency Training Center in Emmitsburg, Maryland; the Mount Weather Emergency Assistance Center in Bluemont, Virginia; and the 10 Federal Regions. In addition to supervising the day-to-day activities of the Agency, many of these managers are expected to participate in FEMA's emergency response operations in the field.

One hundred sixty-seven managers and supervisors from FEMA were asked to respond to the questionnaire. The population consisted of employees with a variety of responsibilities within the Agency and who hold a civil service rating of GS-15 and are in management or supervisory positions. The geographical location of the subjects for this study is depicted in Figure 8.

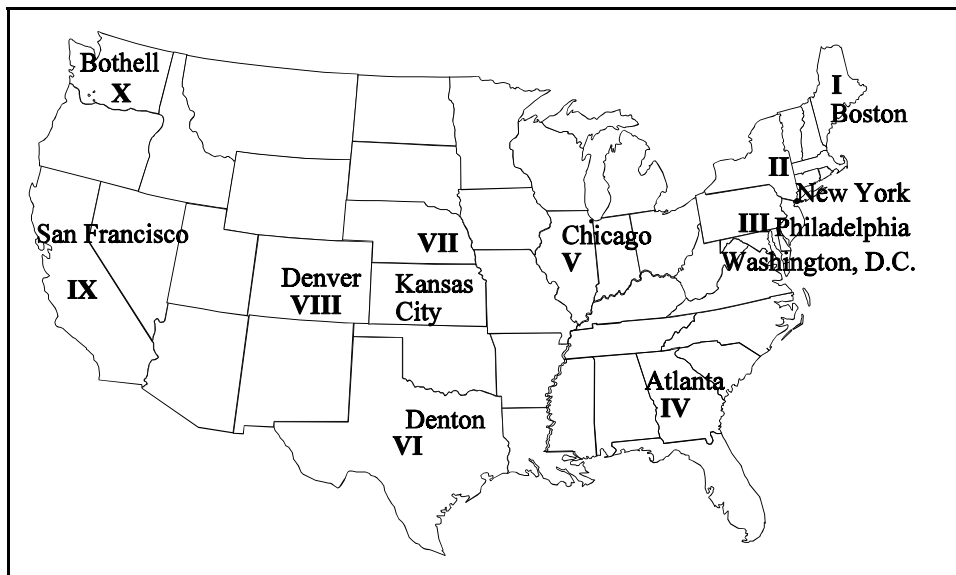


Figure 8. Geographical Locations of Subjects

Subjects were selected from the Federal Emergency Management Agency for several reasons. The requisite data was readily obtainable from that agency and the training staff was enthused about this study. Managers in FEMA have a wide variety of training opportunities available. Additionally, most of the disaster response operations conducted by FEMA involve interagency teams comprising membership from all Federal departments and agencies. FEMA supervisors must learn to deal with a variety of “department cultures” and personalities and perhaps feel social and professional pressures to participate or not participate in training, not only from within FEMA, but from a broader group of people. The results of this study may be

applicable to managers in other Federal agencies with similar populations, structures, and organizational cultures.

Instrumentation

A questionnaire yielded the participation and demographic data needed for this study. The questionnaire included items from three instruments previously used and validated in adult education participation studies, and described below: the *Education Participation Scale* (EPS) comprised Section 3 of the questionnaire, the *Deterrents to Participation Scale* (DPS) and *Pathways to the Future* questionnaire comprised Section 2 of the questionnaire. Demographic data was obtained from Section 1 of the questionnaire. The questionnaire is in Appendix A.

Education Participation Scale (EPS)

The EPS was created by Roger Boshier (1971) in order to provide an empirical test of Cyril Houle's adult education motivation typology. The EPS was revised and perfected several times and evolved into a 40-item questionnaire that provides the respondent a choice of reasons for participating in an adult education activity (Boshier & Collins, 1985). The respondent is asked to indicate how much each item influenced the decision to participate. Scoring of the EPS items is based on a 4-point Likert scale, with a 4 indicating "much influence" and a 1 indicating "no influence."

A number of researchers have used the EPS, many of whom have sent the results of their studies to Roger Boshier for assimilation into his data base (Boshier & Collins, 1985). The EPS is considered to be a highly reliable instrument (Darkenwald & Merriam, 1982). A six-week test and re-test reliability study was conducted as part of Boshier's survey development. As Boshier stated, "split-half reliability and coefficient alpha are therefore useful but less crucial than test-

retest data. The EPS has test-retest item reliabilities which were all significant at the .001 level ranging from .44 to 1.00 with an average of .81” (Boshier, 1976, p. 35).

Three items from the EPS were not used in Section 3 because they were deemed to be irrelevant to the subjects in this study: (8) “to overcome the frustration of day to day living,” (34) “to escape an unhappy relationship,” and (39) “to improve my ability to participate in community work.” Item 2 of the EPS was changed from “to share a common interest with my spouse or a friend,” to “to share a common interest with a co-worker or a friend.” Section 3 of the questionnaire contains 37 EPS items.

Deterrents to Participation Scale (DPS)

The DPS used by Darkenwald and Valentine (1985) was modeled on a previous version developed to identify deterrents to participation in health-related continuing professional education and reported in Scanlan and Darkenwald (1984). In the Darkenwald and Valentine (1985) study, the authors developed a new DPS in order to identify the factors that deter the general public from participating in adult education activities.

For the first step in creating the generic DPS needed for their study, the authors interviewed a diverse group of seventy-two adults and obtained a list of deterrents. This list, items from the original DPS, and a search of the literature yielded fifty-eight items randomly arranged in a questionnaire. Items were scored on a Likert Scale, from 1 indicating “not important” to 5 indicating “very important.”

A prototype DPS was then administered to 117 adults, who also provided a critique of the questionnaire. The authors achieved high reliability ($\alpha = .91$) but decided to shorten the DPS based on the respondents’ comments and item statistics. This pilot resulted in eliminating

twenty-four of the items based on low mean importance scores, low item-to-total scale correlations, and redundancy. The alpha reliability coefficient for the final 34-item DPS was .86.

For this study, item 1 of the DPS was changed from “because I felt I couldn’t compete with younger students” to “because I felt I couldn’t compete with other students.” Item 12 of the DPS was changed from “because I didn’t know about courses available for adults” to “because I didn’t know about courses available.”

Pathways to the Future Questionnaire

The *Pathways to the Future* questionnaire was developed by Robert W. Eatman (1992) in his examination of the barriers to participation in company sponsored education programs. The first draft of the questionnaire was reviewed for content validity by the Program Coordinator for Evaluation Systems, Council for Adult and Experiential Learning (CAEL)/PATHWAYS, by the Co-Director of Training Partnerships, Incorporated, and by the researcher’s dissertation committee. Eatman (1992) presented the resulting draft to participants in a pilot study and made two changes to the questionnaire as a result. Section 2 of the questionnaire for this study includes six items from the *Pathways to the Future* questionnaire.

The researcher analyzed the reliability of Sections 2 and 3 of the questionnaire using Cronbach’s alpha test. The reliability test for Section 2, non-participation, yielded an alpha of 0.81. The reliability test for Section 3, participation, yielded an alpha of 0.86.

Procedures

This author distributed the questionnaire described above to FEMA managers and supervisors via the Agency’s e-mail system using the following procedures. First, a list of managers and supervisors was obtained from the FEMA Office of Human Resources. At the

same time, the e-mail system administrator establish a unique e-mail address for the distribution and receipt of the questionnaires. This author created an e-mail mailing list by selecting the managers and supervisors from the agency-wide e-mail listing. The questionnaire, which was originally developed using MicroSoft Word, was imported into an e-mail message addressed to the subject mailing list. Some reformatting had to be done to the resultant message. Instructions were placed at the beginning of the message and at the end telling the subjects how to complete the questionnaire and respond via the e-mail system. The message, containing the questionnaire, was then sent electronically to managers and supervisors throughout FEMA. The subjects were asked to rate the degree of influence each item on the questionnaire had on their desire to participate or not to participate in government-sponsored training, and to provide demographic information.

The Director of FEMA's Training Division had approved the project approximately one year in advance of the distribution of the questionnaire. However, just prior to distribution, that approval was modified. The questionnaire was distributed, but the overview explaining the purpose of the survey was not permitted to identify a FEMA office as the sponsor of the project. The questionnaire was distributed requesting a response within seven working days.

Non-respondents were sent a second e-mail message requesting them to complete the questionnaire. However, in this second notice, subjects also were given the option of printing out the questionnaire and returning a hard (paper) copy via agency mail. Because some respondents had questioned the sponsorship of the questionnaire, a further explanation of the purpose of the project was included in the second distribution. This explanation advised the subjects that the

questionnaire would yield data to be used in a doctoral dissertation and for analysis by FEMA to improve its management training.

For several pragmatic and political reasons, the researcher was prohibited from sending any further correspondence to the subjects requesting completion of the questionnaire.

Data Processing and Analysis

For this study, the researcher used the Statistical Package for the Social Sciences, Graduate Pack, Advanced Version (SPSS, 1995) to process the data and perform the statistical manipulations necessary to answer the research questions. The analysis approach for each research question is presented below.

1. What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for participating in government-sponsored training?

Analysis approach: Descriptive statistics were calculated for the data. The data were screened for inconsistencies and outliers. The data were then rank ordered to determine each item's relative importance on the respondents' decision to participate. The data were placed into clusters derived from the literature and cluster mean scores were analyzed to determine relative importance.

2. What are the relationships between the demographic variables of age, gender, education level, geographic location of assignment, and family income and the reasons cited for participating in government-sponsored training?

Analysis approach: For the variables of gender and assignment location, the chi-square statistic was computed to test the hypothesis that there is no difference in responses to the influence of the

items relative to the nominal variables (Kratwohl, 1993). For the variables of age, education level, and family income the Kendall tau statistic test was used to determine significant relationships between variables. A correlation matrix was developed for each demographic variable to determine its relationship to the participation item clusters.

3. What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for not participating in government-sponsored training?

Analysis approach: Descriptive statistics were calculated for the data. The data were screened for inconsistencies and outliers. The data were then rank ordered to determine each item's relative influence on the respondents' decision not to participate. The data were placed into factors derived from the literature and factor mean scores were analyzed to determine relative influence.

4. What are the relationships among the demographic variables of age, gender, education level, geographic location of assignment, and family income and the reasons cited for not participating in government-sponsored training?

Analysis approach: For the variables of gender and assignment location, the chi-square statistic was computed to test the hypothesis that there is no difference in responses to the influence of the items relative to the nominal variables. For the variables of age, education level, and family income the Kendall tau statistic test was used to determine significant relationships between variables. A correlation matrix was developed for each demographic variable to determine its relationship to the non-participation item factors.

5. How do participants and non-participants in government-sponsored training compare with respect to gender, geographic location of assignment, age, education level, and family income?

Analysis approach: For each variable, the percentage of participants and non-participants were compared. A paired t-test was conducted to identify significant relationships between participants' and non-participants' responses to Section 2 of the questionnaire.

Chapter Summary

This chapter included a description of the subjects for the study, the instrumentation, the procedures for the study, and the data analyses. The results of the study will be presented in Chapter IV. Conclusions and recommendations will be presented in Chapter V.

CHAPTER IV

RESULTS

This study was an examination of the motivation of Federal government managers and supervisors to participate in government-sponsored training. This chapter presents a discussion of the results of that examination, organized as follows: response analysis, demographic profile of subjects, the five research questions, respondents' comments, and summary. The bulk of the interpretation of these results is presented in Chapter V.

Response Analysis

Of the 167 questionnaires sent via e-mail to managers and supervisors in the Federal Emergency Management Agency (FEMA), 147 were verified as having been received. Twenty-eight subjects responded without a second prompting. An additional 12 subjects responded via e-mail after being sent a second e-mail message urging them to complete the questionnaire. Two additional questionnaires were returned in hard copy using the agency's interoffice mail system. Thus, the total response rate was 28.5%. Of the 42 questionnaires returned, two were unusable.

Demographic Profile of Subjects

The respondents were over 40 years of age, with an average age of approximately 51 years. Approximately three quarters of the respondents were men. (Approximately three quarters, 77%, of the manager population are men.) Seventy percent of the respondents had a baccalaureate or higher degree. Over 55% of the respondents had a total family income in excess of \$100,000. Most of the responses came from managers assigned to the FEMA Headquarters in Washington, D.C. Of those who responded, 80% had participated in government-sponsored

training, as indicated by them having completed Section 3 of the questionnaire. Table 1 provides a detailed demographic profile of the respondents.

Table 1

Demographic Profile of Respondents

	<u>M</u>	<u>SD</u>	<u>Low</u>	<u>High</u>
Age	51.00	5.5	40	63.00
			<u>N</u>	<u>%</u>
Gender				
Female			9	22.5
Male			31	77.5
Assignment Location				
FEMA Headquarters			21	52.5
Regional Office			9	22.5
National Emergency Training Center			1	2.5
Mount Weather Emergency Assistance Center			1	2.5
Other			8	20.0
Education Level				
High School			2	5.0
Associate Degree			9	22.5
Bachelor's Degree			15	37.5
Master' Degree			12	30.0
Doctoral Degree			2	5.0
Total Family Income				
Less than \$55,000			1	2.5
\$55,000 to \$70,000			2	5.0
\$70,001 to \$85,000			8	20.0
\$85,001 to \$100,000			9	22.5
\$100,001 to \$115,000			15	37.5
More than \$115,000			5	12.5
Respondents who had participated in government-sponsored training			32	80.0

Research Question 1--What Is The Relative Importance of Reasons Cited for Participation?

The mean scores from Section 3 of the questionnaire were rank ordered to determine the relative importance of the reasons for participation in government-sponsored training. The reasons for participation are listed in order of importance Table 2.

Having used a 4-point scale for Section 3 of the questionnaire, the researcher established that any item with a mean (M) of 2.5 or greater was considered to have had a significant influence on the decision to participate. As shown in Table 2, 7 items fell within this range. The primary reason for participating in government-sponsored training was *to increase my competence in my job*.

Table 2

Relative Importance of Reasons for Participation

Item	Reason for Participation	<u>M</u>	<u>SD</u>	Low	High
66	To increase my competence in my job	3.83	0.46	2	4
52	To secure professional advancement	3.28	1.02	1	4
50	To seek knowledge for its own sake	2.78	1.10	1	4
71	To gain insight into human relationships	2.70	1.15	1	4
80	To meet some formal requirements	2.66	1.32	1	4
63	To keep up with competition	2.66	1.14	1	4
56	To satisfy an inquiring mind	2.62	1.18	1	4
58	To give me higher status in my job	2.45	1.24	1	4
78	To keep up with others	2.32	1.02	1	4
60	To stop myself from becoming mentally stagnant	2.23	1.19	1	4
59	To supplement a narrow previous education	2.17	1.14	1	4
55	To carry out the recommendation of some authority	2.17	1.31	1	4
84	To learn just for the sake of learning	2.10	0.98	1	4
73	To learn for the joy of learning	2.10	1.11	1	4
77	To improve my ability to serve mankind	2.07	1.19	1	4

61	To acquire knowledge that will help me with other educational courses	2.07	1.07	1	4
86	To comply with instructions from someone else	2.03	1.21	1	4
53	To become more effective as a citizen	2.03	1.05	1	4
51	To share a common interest with a co-worker or a friend	1.81	1.01	1	4
83	To comply with the suggestions of someone else	1.72	1.03	1	4
70	To prepare for service to the community	1.69	0.97	1	4
67	To gain insight into myself and my personal problems	1.66	1.08	1	4
82	To provide a contrast to my previous education	1.48	0.83	1	4
64	To escape the intellectual narrowness of my occupation	1.41	0.73	1	3
68	To help me earn a degree, diploma, or certificate	1.40	0.81	1	4
65	To participate in group activity	1.31	0.54	1	3
79	To improve my social relationships	1.28	0.59	1	3
75	To provide a contrast to the rest of my life	1.24	0.44	1	2
62	To fulfill a need for personal associations and friendships	1.20	0.48	1	3
76	To get a break in the routine of home and work	1.14	0.44	1	3
85	To make new friends	1.14	0.44	1	3
72	To have a few hours away from responsibilities	1.13	0.35	1	2
54	To get relief from boredom	1.13	0.43	1	3
57	To be accepted by others	1.10	0.31	1	2
74	To become acquainted with congenial people	1.10	0.31	1	2
81	To maintain or improve my social position	1.07	0.26	1	2
69	To escape television	1.00	0.00	1	1

The researcher continued the analysis by grouping the questionnaire items into the clusters established by Boshier (1977) and Boshier and Collins (1985). Cognitive Interest items reflected an intellectual interest in learning for the sake and joy of learning. These items did not reflect participation to rectify an environmental imbalance or deficit. The Professional Advancement cluster included those items deemed important for advancement in professional

rank and stature in one's occupation. Items in the Community Service cluster included those that helped achieve social or community objectives and reflected a humanitarian concern. External Expectation items indicated an extrinsic, rather than intrinsic, motivation that was usually job-related. The Social Stimulation cluster reflected a need to rectify an environmental or social deficiency. The items in the Social Contact cluster associated with a desire to make friends and enhance social relationships.

The item clusters, along with the cluster means and standard deviations are depicted in Tables 3 through 8. The tables also indicate the corresponding Education Participation Scale (EPS) item numbers and those used in this study. Analysis of the cluster means indicated that Cognitive Interest items were the most important to FEMA managers in their decision to participate in training. This was followed closely by Professional Advancement reasons for participation. Five of the top 7 items in the rank-ordered Table 2 fell within these two clusters.

The researcher conducted a reliability analysis of each cluster using Cronbach's alpha test. Each cluster except Social Stimulation had a level of reliability that would validate its use in this study. The low reliability of Social Stimulation may indicate the items in that cluster were irrelevant to the government manager. The reliability coefficient is included in each table after the cluster name.

Table 3

Cognitive Interest Cluster ($\alpha = .76$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
2.29	1.1	1	50	To seek knowledge for its own sake
		7	56	To satisfy an inquiring mind
		25	73	To learn for the joy of learning
		37	84	To learn just for the sake of learning
		2	51	To share a common interest with a co-worker or a friend

Table 4

Professional Advancement Cluster ($\alpha = .72$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
2.22	1.2	11	59	To supplement a narrow previous education
		16	64	To escape the intellectual narrowness of my occupation
		27	75	To provide a contrast to the rest of my life
		35	82	To provide a contrast to my previous education
		3	52	To secure professional advancement
		10	58	To give me higher status in my job
		18	66	To increase my competence in my job
		20	68	To help me earn a degree, diploma, or certificate
		32	80	To meet some formal requirement
		13	61	To acquire knowledge that will help me with other educational courses

Table 5

Community Service Cluster ($\alpha = .68$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
2.03	1.1	4	53	To become more effective as a citizen
		22	70	To prepare for service to the community
		29	77	To improve my ability to serve mankind
		19	67	To gain insight into myself and my personal problems
		23	71	To gain insight into human relationships

Table 6

External Expectations Cluster ($\alpha = .63$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
1.99	1.1	6	55	To carry out the recommendation of some authority
		36	83	To comply with the suggestions of someone else
		40	86	To comply with instructions from someone else
		15	63	To keep up with competition
		30	78	To keep up with others
		33	81	To maintain or improve my social position

Table 7

Social Stimulation Cluster ($\alpha = .33$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
1.29	.72	5	54	To get relief from boredom
		28	76	To get a break in the routine of home and work
		9	57	To be accepted by others
		21	69	To escape television
		24	72	To have a few hours away from responsibilities
		12	60	To stop myself from becoming mentally stagnant

Table 8

Social Contact Cluster ($\alpha = .62$)

<u>M</u>	<u>SD</u>	EPS Item No.	Study Item No.	Reason for Participation
1.21	.48	14	62	To fulfill a need for personal associations and friendships
		31	79	To improve my social relationships
		17	65	To participate in group activity
		26	74	To become acquainted with congenial people
		38	85	To make new friends

Research Question 2--What Are The Relationships Between Demographic Variables and Reasons for Participation?

The researcher analyzed the relationships among age, gender, education level, geographic location of assignment, family income, and the reasons cited for participation in government-sponsored training. Each demographic variable was analyzed by comparing its relationship with the participation clusters established in Tables 3 through 8 using point biserial correlations.

The researcher then compared the demographic variables with each reason for participation. The chi-square statistic tested the hypothesis that there was no difference in reasons cited relative to gender and assignment location. Appendix D in Computational Handbook of Statistics (Bruning & Kintz, 1987) provided the critical values for chi-square. Chi-square values that exceeded the critical value were determined to indicate significant differences in reasons for participation by gender and assignment location.

The variables of age, education level, and family income were analyzed using the Kendall tau statistic test at the 0.05 level of significance. A significance level of less than 0.05 (designated with *) indicated a significant correlation between variables. A direct or inverse relationship between variables is determined by the positive or negative value of the Kendall tau correlation coefficient.

The tables depicting the analyses of each reason for participation include only those items for which there was statistical significance. The tables in Appendix B provide analyses of all reasons for participation. The reasons for participation are listed in rank order of importance.

Gender

As shown in Table 9, there was no correlation between gender and the participation cluster scores.

Table 9

Correlation Between Gender and Participation Cluster Scores

	Participation Clusters					
	Cognitive Interest	Professional Advancement	Community Service	External Expectations	Social Stimulation	Social Contact
<u>R</u>	.0231	-.1523	-.1838	-.2028	-.1345	-.0947
<u>p</u>	.900	.430	.322	.291	.471	.625

Table B-1 shows the relationship of gender with each reason for participation. A critical chi-square value of 7.8 was determined using 3 degrees of freedom and a 0.05 level of significance. No item had a chi-square statistic that exceeded the critical value. This would indicate that there is little if any difference in the importance of the reasons cited for participation in training by male and female managers in FEMA.

Assignment Location

Table 10 shows a significant mid-level positive correlation between assignment location and community service.

Table 10

Correlation Between Assignment Location and Participation Cluster Scores

	Participation Clusters					
	Cognitive Interest	Professional Advancement	Community Service	External Expectations	Social Stimulation	Social Contact
<u>R</u>	.2507	.2456	.4808	-.0223	.2275	.3108
<u>p</u>	.166	.199	.006*	.909	.218	.101

Table 11 shows the relationship of assignment location with the reasons for participation. A critical chi-square value of 21.0 was determined using 12 degrees of freedom and a 0.05 level of significance. Three reasons for participation had a chi-square statistic exceeding the critical value, indicating a difference in the importance of the reasons for participation based on location of assignment. Two of those 3 reasons (53 and 70) fell within the community service cluster.

The reason *to help me with other courses*, item 61, was not very important to those assigned to the Headquarters (82% rated this item a 1 or 2), National Emergency Training Center (NETC) (rating of 2), or Mount Weather (rating of 2), but was highly important to some assigned to a Regional Office (33% rated this item a 4) and Others (all ratings were 3 or 4).

To become a more effective citizen, item 53 was of little importance to those assigned the Headquarters (88% rated this item a 1 or 2) or a Regional Office (86% rated this item a 1 or 2). However, the NETC rated this item a 4, Mount Weather a 3, and 80% of others rated this item a 3 or 4.

For item 70, *to prepare for service to the community*, those assigned the NETC considered this reason important (rated a 4), while those assigned elsewhere did not, with most (79%) rating the item a 1 or 2.

Table 11

Significant Relationship of Assignment Location with Reasons for Participation

Item	Reason for Participation	Chi-square Statistic	Significant Differences
61	To acquire knowledge that will help me with other educational courses	22.85	Yes
53	To become more effective as a citizen	24.39	Yes
70	To prepare for service to the community	25.40	Yes

Age

As shown in Table 12, there was a significant mid-level positive correlation between age and community service.

Table 12

Correlation Between Age and Participation Cluster Scores

	Participation Clusters					
	Cognitive Interest	Professional Advancement	Community Service	External Expectations	Social Stimulation	Social Contact
<u>R</u>	.0445	.2316	.5593	.0939	-.1029	.1026
<u>p</u>	.816	.236	.001*	.634	.588	.603

Table 13 shows the relationship between age and the reasons for participation. Levels of significance less than or equal to 0.05 represent a significant correlation between age and reasons for participation. Four items showed a level of significance less than 0.05. Each of these 4 had a mid-level (approximately 0.300) positive correlation, indicating the older the manager, the more important the reason. One of these items (53) fell within the community service cluster.

For item 61, *to acquire knowledge that will help me with other educational courses*, approximately 68% of the respondents provided a rating of 1 or 2, indicating a relatively low importance. Of those who rated this item more important (3 or 4), approximately 78% were in the older range of 51 to 60 years of age.

The profile for item 53, *to become more effective as a citizen*, was similar to that of item 61. Approximately 70% of the respondents rated the item a 1 or 2. Of those who gave the item a rating of 3 or 4, approximately 77% were 54 to 63 years of age.

The concentration of ratings for item 82, *to provide a contrast to my previous education*, fell in the *not important* category; 70% of respondents rated this item a 1. This rating was spread almost evenly across the age spectrum. Those few who rated this item in the important range were 52 to 60 years old.

Every respondent rated item 81, *to maintain or improve my social position*, as not important. Approximately 93% provided a rating of 1 and the remaining 7% provided a rating of 2. The positive correlation with age is due to the fact that the 7% who rated the item a 2 were at the higher end of the age spectrum (57 to 63 years).

Table 13

Significant Relationship of Age with Reasons for Participation

Item	Reason for Participation	Correlation Coefficient	Level of Significance
61	To acquire knowledge that will help me with other educational courses	.3041	*.043
53	To become more effective as a citizen	.3883	*.008
82	To provide a contrast to my previous education	.3094	*.048
81	To maintain or improve my social position	.3353	*.040

Education Level

Table 14 shows there was a significant mid-level negative correlation between education level and professional advancement.

Table 14

Correlation Between Education Level and Participation Cluster Scores

	Participation Clusters					
	Cognitive Interest	Professional Advancement	Community Service	External Expectations	Social Stimulation	Social Contact
<u>R</u>	.1625	-.4185	-.0735	.2012	.1965	.0306
<u>p</u>	.374	.024*	.694	.295	.289	.875

Table 15 shows the relationship between education level and the reasons for participation. Levels of significance less than or equal to 0.05 represent a significant correlation between education level and reasons for participation. One item showed a significance less than 0.05. This item (59) fell within the professional advancement cluster.

Item 59, *to supplement a narrow previous education*, indicated a modest negative correlation (-.36) with education level. This would indicate the more highly educated the respondent, the less important this item was in the decision to participate in training. In fact, 68% of respondents with a bachelor's degree or higher rated this item a 1 or 2. Approximately 57% of the respondents at the associate's degree or high school level rated this item a 3 or 4.

Table 15

Significant Relationship of Education Level with Reasons for Participation

Item	Reason for Participation	Correlation Coefficient	Level of Significance
59	To supplement a narrow previous education	-.3609	*.024

Family Income

There was no correlation between family income and any of the participation clusters, as shown in Table 16.

Table 16

Correlation Between Family Income and Participation Cluster Scores

	Participation Clusters					
	Cognitive Interest	Professional Advancement	Community Service	External Expectations	Social Stimulation	Social Contact
<u>R</u>	.1138	-.2571	.0371	-.2824	-.0772	-.0277
<u>p</u>	.564	.196	.851	.154	.696	.891

Table B-5 shows the relationship between family income and the reasons for participation. Levels of significance less than or equal to 0.05 represent a significant correlation

between family income and reasons for participation. No item showed a significance less than 0.05, indicating no significant relationship between family income and reasons for participation in government-sponsored training.

Research Question 3--What Is The Relative Importance of Reasons Cited for Non-Participation?

The mean scores from Section 2 of the questionnaire were rank ordered to determine the relative importance of the reasons for non-participation. The reasons for non-participation are listed in order of importance in Table 17.

The primary reason for not participating in government-sponsored training was *the course was scheduled at an inconvenient time*. Having used a 5-point scale for Section 2 of the questionnaire, the researcher established that any item with a mean (M) of 3 or greater was considered to be of significant importance in the decision not to participate. As shown in Table 17, no items fell within this range. It is interesting that the top 4 items appear to be centered on the needs and convenience of the respondents and not the characteristics of the training itself.

Table 17

Relative Importance of Reasons for Non-Participation

Item	Reason for Non-Participation	<u>M</u>	<u>SD</u>	Low	High
20	The course was scheduled at an inconvenient time	2.98	1.49	1	5
38	I didn't think the course would meet my needs	2.87	1.47	1	5
43	It would interfere with my job responsibilities	2.84	1.48	1	5
15	The course was offered at an inconvenient location	2.78	1.64	1	5
18	I didn't know about courses available	2.73	1.55	1	5
29	The available courses did not seem useful or practical	2.68	1.40	1	5
37	My employer would not provide financial assistance or reimbursement	2.45	1.77	1	5
14	The courses available did not seem interesting	2.32	1.46	1	5

23	The courses available were of poor quality	2.30	1.36	1	5
12	I wanted to learn something specific, but the course was too general	2.25	1.45	1	5
19	The amount of time required to finish the course	2.18	1.50	1	5
35	The course was not on the right level for me	2.13	1.32	1	5
46	Incentives for further training are not obvious or don't exist	2.13	1.42	1	5
47	My supervisor didn't encourage or enable my participation	2.08	1.48	1	5
45	There is too much red tape in getting enrolled	2.03	1.33	1	5
36	I didn't think I could attend regularly	2.00	1.34	1	5
16	I couldn't afford the registration or course fees	1.90	1.29	1	5
11	I didn't have time for the studying required	1.85	1.39	1	5
32	Education would not help me in my job	1.68	1.27	1	5
30	I wasn't willing to give up my leisure time	1.64	1.14	1	5
26	I'm not that interested in taking courses	1.63	0.97	1	4
22	Transportation problems	1.60	1.26	1	5
27	Participation would take away from time with my family	1.59	0.99	1	5
42	It would interfere with my home responsibilities	1.56	0.94	1	5
39	I prefer to learn on my own	1.56	0.91	1	5
34	I couldn't afford miscellaneous expenses like travel, books, etc.	1.49	1.10	1	5
44	There is no way to get credit towards a degree	1.23	0.90	1	5
28	I had trouble arranging for child care	1.23	0.74	1	5
31	The course was offered in an unsafe area	1.21	0.73	1	5
21	My family did not encourage participation	1.15	0.58	1	4
10	I didn't think I would be able to finish the course	1.15	0.58	1	4
33	I felt unprepared for the course	1.13	0.66	1	5
8	I don't enjoy studying	1.13	0.46	1	3
13	I didn't meet the requirements	1.13	0.65	1	5
24	I was not confident of my learning ability	1.10	0.63	1	5
25	Family problems	1.08	0.35	1	3
17	I felt I was too old to take the course	1.05	0.22	1	2
9	Personal health problem or handicap	1.05	0.22	1	2
7	I felt I couldn't compete with other students	1.03	0.16	1	2
41	There was no place I could study or practice	1.00	0.00	1	1

The researcher grouped the questionnaire items into factors derived from the literature. Those items taken from the Deterrents to Participation Scale (DPS) were grouped into the factors established by Darkenwald and Valentine (1985). The researcher then inserted those items taken from Eatman (1992) into the established factors based on content association. Lack of Confidence items reflected self-doubt, and low academic self-esteem, including indirect sources of self-doubt influenced by family and associates. The items comprising the factor Lack of Course Relevance indicated a perceived lack of relevance on the part of the respondents and congruence between course offerings and perceived needs and interests. Time Constraints conveyed the notion that respondents were pressed for time but not an absolute lack of time. The factor Low Personal Priority indicated low motivation or interest in participating in an educational endeavor. Items in the Cost factor related to any expenses associated with participation. The last factor, Personal Problems, included child care, family problems, and personal health and handicaps.

The factors, along with the factor means and standard deviations are depicted in Tables 18 through 23. The tables also indicate the corresponding Deterrents to Participation Scale (DPS) item numbers and those used in this study. Factor means indicated that Lack of Course Relevance items were the most important to FEMA managers in their decision not to participate in training. This was followed closely by Time Constraints reasons for non-participation. Eight of the top 10 items in the rank-ordered Table 17 fell within these two clusters.

The researcher conducted a reliability analysis of each factor using Cronbach's alpha test. Four of the six factors had a level of reliability that would validate its use in this study. The factors Lack of Confidence and Personal Problems had low reliability coefficients. These factors were of least importance to government managers in their decision not to participate in training and also may indicate the items in those factors were irrelevant to the government manager. Additionally, managers may not have been willing to admit that personal problems would influence their decision making. The reliability coefficient is included in each table after the factor name.

Table 18

Lack of Confidence Factor ($\alpha = .31$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
1.20	.74	18	24	Because I was not confident of my learning ability
		1	7	Because I felt I couldn't compete with other students
		11	17	Because I felt I was too old to take the course
		27	33	Because I felt unprepared for the course
		4	10	Because I didn't think I would be able to finish the course
		34	40	Because my friends did not encourage my participation
		7	13	Because I didn't meet the requirements for the course
		15	21	Because my family did not encourage participation
			47	Because my supervisor did not encourage or enable my participation

Table 19

Lack of Course Relevance Factor ($\alpha = .83$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
2.29	1.4	23	29	Because the available courses did not seem useful or practical
		32	38	Because I didn't think the course would meet my needs
		8	14	Because the courses available did not seem interesting
		17	23	Because the courses available were of poor quality
		6	12	Because I wanted to learn something specific, but the course was too general
		29	35	Because the course was not on the right level for me
			44	Because there is no way to get credit towards a degree
			46	Because incentives for further training are not obvious or don't exist

Table 20

Time Constraints Factor ($\alpha = .76$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
2.23	1.4	13	19	Because of the amount of time required to finish the course
		30	36	Because I didn't think I could attend regularly
		5	11	Because I didn't have the time for the studying required
		14	20	Because the course was scheduled at an inconvenient time
		9	15	Because the course was offered at an inconvenient location

Table 21

Low Personal Priority Factor ($\alpha = .65$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
1.76	1.2	20	26	Because I'm not that interested in taking courses
		24	30	Because I wasn't willing to give up my leisure time
		2	8	Because I don't enjoy studying
		21	27	Because participation would take away time from my family
		26	32	Because education would not help me in my job
			42	Because it would interfere with my home responsibilities
			43	Because it would interfere with my job responsibilities
		45	Because there is too much red tape in getting enrolled	

Table 22

Cost Factor ($\alpha = .71$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
1.95	1.4	28	34	Because I couldn't afford miscellaneous expenses like travel, books, etc.
		10	16	Because I couldn't afford the registration or course fees
		31	37	Because my employer would not provide financial assistance or reimbursement

Table 23

Personal Problems Factor ($\alpha = .18$)

<u>M</u>	<u>SD</u>	DPS Item No.	Study Item No.	Reason for Non-Participation
1.19	.71	22	28	Because I had trouble arranging for child care
		19	25	Because of family problems
		3	9	Because of a personal health problem or handicap
		29	31	Because the course was offered in an unsafe area
			41	Because there was no place I could study or practice

Research Question 4--What Are The Relationships Between Demographic Variables and Reasons for Non-Participation

Analysis was performed to determine the relationships between age, gender, education level, geographic location of assignment, family income, and the reasons cited for non-participation in government-sponsored training. The chi-square statistic tested the hypothesis that there was no difference in reasons cited relative to gender and assignment location. Appendix D in Computational Handbook of Statistics (Bruning & Kintz, 1987) provided the critical values for chi-square. Chi-square values that exceeded the critical value were determined to indicate significant differences in reasons for participation by gender and assignment location. The tables depicting the results of this analysis include only those items for which there was statistical significance. Appendix C provides tables with analyses of all reasons for non-participation. The reasons for non-participation are listed in rank order of importance.

Gender

Table 24 shows the relationship of gender with the reasons for non-participation. A critical chi-square value of 7.8 was determined using 3 degrees of freedom and a 0.05 level of significance. One item had a chi-square statistic that exceeded the critical value. For item 36, *I didn't think I could attend regularly*, men tended to rate this reason as less important than women. Ninety percent of the men versus 78% of the women rated this item a 3 or lower.

Table 24

Significant Relationship of Gender with Reasons for Non-Participation

Item	Reason for Non-Participation	Chi-square Statistic	Significant Differences
36	<i>I didn't think I could attend regularly</i>	8.48	Yes

Assignment Location

Table 25 shows the relationship of assignment location with the reasons for non-participation. A critical chi-square value of 21 was determined using 12 degrees of freedom and a 0.05 level of significance. Three items had a chi-square statistic that exceeded the critical value.

Item 38, *I didn't think the course would meet my needs*, had more influence on those assigned to the FEMA Headquarters (70% rated this item a 3 or higher) than to other locations. Those assigned to a Regional Office were evenly split; 50% rated a 1 or 2 and 50% rated a 3 or 4. Approximately 90% of those assigned to the National Emergency Training Center, Mount Weather Emergency Assistance Center, and Other rated this item a 3 or lower.

The ratings spread for item 18, *I didn't know about courses available*, was slightly different from item 38 for those assigned to the Headquarter or a Regional Office. Approximately 55% of the Headquarters respondents rated this item a 3 or higher, while 66% of those assigned to a Regional Office rated it a 1 or 2. Approximately 82% of the remaining respondents rated this item a 3 or higher.

For item 45, *there is too much red tape in getting enrolled*, managers assigned to the Headquarters and a Regional Office and those assigned elsewhere provided different answers. Approximately 97% of those assigned to the Headquarters or a Regional Office rated this item a 3 or lower. Approximately 70% of those assigned to the National Emergency Training Center, Mount Weather Emergency Assistance Center, and Other rated this item 3 or higher. It would appear the higher the stature of the office, the less red tape there is in enrolling.

Table 25

Significant Relationship of Assignment Location with Reasons for Non-Participation

Item	Reason for Non-Participation	Chi-square Statistic	Significant Differences
38	I didn't think the course would meet my needs	21.01	Yes
18	I didn't know about courses available	25.09	Yes
45	There is too much red tape in getting enrolled	31.04	Yes

Age, education level, and family income variables were analyzed using the Kendall tau statistic test at the 0.05 level of significance. A significance level of less than 0.05 (designated with *) indicated a significant correlation between variables. The positive or negative value of

the Kendall tau correlation coefficient indicates a direct or inverse relationship between variables.

Age

Table 26 shows the relationship between age and the reasons for non-participation. Levels of significance less than or equal to 0.05 represent a significant correlation between age and reasons for non-participation.

Item 33, *I felt unprepared for the course*, was the only item that had a significance level of less than 0.05. A low positive correlation (.2866) between this reason and age of the respondents indicated increasing importance of this item with increasing age. However, further analysis showed that only 2 scores were above the rating of 1. This item more than likely indicated significance because those 2 scores were associated with respondents 57 and 60 years of age.

Table 26

Significant Relationship of Age with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
33	I felt unprepared for the course	.2866	*.046

Education Level

Table 27 shows the relationship between education level and the reasons for non-participation. Levels of significance less than or equal to 0.05 represent a significant correlation between education level and reasons for non-participation. Five items had a level of significance

less than 0.05. All 5 items had a low to mid-level positive correlation between education level and the importance of the reason for non-participation.

For item, 14, *the courses available did not seem interesting*, the higher the education level, the more influence this item had on the decision not to participate. Approximately 73% of managers at the high school or associate degree level rated this item a 1, while only 51% of those with a bachelor degree or higher rated this item a 1 or 2. Those with a bachelor or master's degree were the only respondents that rated this item a 5.

Item 32, *education would not help me in my job*, was rated low (a rating of 1) by all at the high school, associate degree, and doctoral degree level. Those managers with a bachelor or master's degree rated toward the low end of the scale, but also provided ratings of 3, 4, and 5.

Ratings for item 30, *I wasn't willing to give up my leisure time*, were similar to that of item 32. All except 1 respondent at the high school, associate degree, and doctoral degree level rated this item a 1. Those with a bachelor degree rated this item a 3 or less. Those with a master's degree rated this item evenly across the scale.

All respondents at the high school, associate degree, and doctoral degree level rated item 42, *it would interfere with my home responsibilities*, a 1. Respondents with a bachelor or master's degree spread their ratings with an almost even split between the upper and lower levels of the scale.

The reason *the course was offered in an unsafe area*, item 31, was of little influence to all except those with a master's degree. Approximately 90% of all respondents considered this item to have no influence (a rating of 1) on their decision not to participate in training. Only those with a master's degree provided ratings of 2, 3, and 5.

Table 27

Significant Relationship of Education Level with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
14	The courses available did not seem interesting	.2710	*.044
32	Education would not help me in my job	.3459	*.018
30	I wasn't willing to give up my leisure time	.3989	*.005
42	It would interfere with my home responsibilities	.3507	*.014
31	The course was offered in an unsafe area	.3270	*.026

Family Income

Table 28 shows the relationship between family income and the reasons for non-participation. Levels of significance less than or equal to 0.05 represent a significant correlation between family income and reasons for non-participation. One item showed a significance less than 0.05. Item 27, *participation would take away from time with my family*, showed a mid-level to high positive correlation (.5058) with family income level. All respondents with an income level at \$100,000 or below rated this item a 1. Those managers with an income level above \$100,000 considered this item to be of greater influence with approximately 54% having rated it in the 2 to 5 range.

Table 28

Significant Relationship of Family Income with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
27	Participation would take away from time with my family	.5058	*.001

A correlation matrix was developed to determine the relationships between the demographic variables and the non-participation factors. Table 29 shows the correlation coefficients for this analysis, however, no significant correlations were established at or below the 0.05 significance level.

Table 29

Correlation Between Demographic Variables and Non-Participation Factor Scores

<u>Demographic Variables</u>	<u>Non-Participation Factors</u>					
	Lack of Confidence	Lack of Course Relevance	Time Constraints	Low Personal Priority	Cost	Personal Problems
Gender	-.0863	-.2563	.0980	.2661	-.2464	.0767
Assignment Location	-.1182	-.0937	-.2605	-.2449	.1497	-.1785
Age	.1848	-.2447	-.1009	-.1559	.0380	-.1496
Education Level	.1545	.1586	.0964	.1339	.1107	.1553
Family Income	.0000	-.0202	-.1142	.0883	-.0277	.2464

*p<0.05, **p<0.001

**Research Question 5--How Do Participants and Non-Participants Compare With Respect
To Demographic Variables?**

This question addresses the characteristics of participants versus non-participants.

Participants in government-sponsored training were identified as those who had completed Section 3 of the questionnaire. Table 30 compares demographic variables of participants versus non-participants.

Although the mean age for participants was higher than non-participants, they differed by less than 1 standard deviation. A noticeably higher percentage of the male respondents (83.8%) were participants than were their female counterparts (66.6%). The highest participation rates based on assignment location were the FEMA Headquarters (90%) and the Regional Offices (77.7%). This may indicate a propensity for participation by those at the higher levels and more visible locations of the agency. The lowest participation rate based on education level were centered on those with the lowest education level. This finding corresponds with the findings of most other participation studies (Darkenwald & Merriam, 1982). There was a positive relationship between family income and the participation rate. This relationship is contrary to that found by Anderson and Darkenwald (1979), who determined family income had little effect on participation.

Table 30

Demographic Characteristics of Participants versus Non-Participants

Age	<u>M</u>	<u>SD</u>	<u>Low</u>	<u>High</u>
Participants	51.90	5.09	42	63
Non-Participants	47.14	5.81	40	55

	Participants		Non-Participants		% of Demographic Variables That Are Participants
	N	% of Participants	N	% of Non-Participants	
Gender					
Female	6	18.8	3	37.5	66.6
Male	26	81.3	5	62.5	83.8
Assignment Location					
FEMA Headquarters	18	56.3	2	25.0	90.0
Regional Office	7	21.9	2	25.0	77.7
National Emergency Training Center	1	3.1	0		100
Mount Weather Emergency Assistance Center	1	3.1	1	12.5	50.0
Other	5	15.6	3	37.5	62.5
Education Level					
High School	1	3.1	1	12.5	50.0
Associate Degree	6	18.8	3	37.5	66.6
Bachelor's Degree	14	43.8	1	12.5	93.3
Master's Degree	9	28.1	3	37.5	75.0
Doctoral Degree	2	6.3	0		100
Family Income					
Less than \$55,000	0		0		
\$55,000 to \$70,000	0		1	12.5	00.0
\$70,001 to \$85,000	1	3.1	1	12.5	50.0
\$85,001 to \$100,000	6	18.8	2	25.0	75.0
\$100,001 to \$115,000	7	21.9	2	25.0	77.7
More than \$115,000	14	43.8	1	12.5	93.3

As an adjunct to this research question, the researcher conducted a paired t-test to identify any significant differences between how participants and non-participants rated items in Section 2 of the questionnaire, which addressed non-participation. One item, *because I don't have time for the studying required*, indicated a 2-tailed significance of .002. As would be expected, non-participants rated this item higher (mean of 3) than participants (mean of 1).

Respondent Comments

This section presents the respondents' comments that were included in the returned questionnaires. The researcher presents these comments unedited to provide a true flavor of the respondents attitudes toward government-sponsored training. The comments reflect attitudes concerning managers need for training, government funds available for training, the time available to attend training, and the enrollment process. In Chapter V, the researcher presents conclusions drawn from these comments.

Comments From Section 2--Non-Participation

1. I am new to the job and have a great deal of work to do getting the training group where they need to be. Once I have the systems in place, and we are up to speed (next year) I would be interested in some of the training opportunities offered by EMI, and via the Dept. Of Agriculture here in Dallas and elsewhere.
2. In addition to 35 years of experience in management, I have about 5 years of management training and education -- not counting my undergraduate years. In other words, if I do not know how to manage now, I will never know.
3. For the last 7 years my duty station was outside the country. During this time I received no training because management would not approve the travel back to the US to participate in training sessions (including mandatory training).

4. Most federal courses are overly generic cookbook sessions with marginally skilled presenters offering little practical training or educational opportunities for managers.
5. Extensive travel requirements (much of which is unplanned and for long duration) preclude regular classroom training.
6. There is never any travel money available for training. The 182s are very difficult to work with; signature blocks change hourly; if there are any typographical errors, it has to be redone (put 182s on computer, that would help). The lead time for training is far too long to get approvals; there are times that training comes up within 2 weeks or so, not enough time to get 182s approved.
7. Courses don't address my needs; don't provide CEUs; don't meet expectations.
8. Many of the courses are offered at FEMA HQ; we are notified a day or two before the course, which really doesn't seem to matter, since there are no travel dollars available. I have personally been turned down for so many courses, that I have become quite choosy about what I apply for.
9. Two major issues: 1-not enough money, and 2-not enough time!
10. I can't afford big blocks of time. Most of the courses I've passed by have been insanely time-intensive.
11. I try to go to courses that are relevant to my job and interests. I don't go to courses that aren't. That's the primary reason for my choice. Of course, I

can't go to courses I don't know about, which seems to be a problem for us here at this office. Would be good to have a better means of advertising courses. The whole IDP thing needs to be fixed too. It has the potential of being a great way to help employees develop toward greater competency or to pursue career goals, but, as FEMA administers it, it amounts to little more than passing a course catalog around and picking something. Thanks for the opportunity to comment.

12. Management courses I have been required to take in the last 5 years have been so basic as to be insulting. I completed Management 101 years ago when I first became a manager. However, senior FEMA management alleged that, because of the complaints of some employees, all FEMA middle managers were in need of basic management training. The courses I was required to take assumed I had no prior management experience or training, were poor compared to the courses I took years ago, and were rather insulting. Spend more of your time improving the quality of the training offered and you will get plenty of supervisors who want to take the courses. Word of mouth advertising of a good training course is worth much more than mandated, poor courses.
13. I enrolled and was rejected by the selection committee.
14. Training funds are not available and work requirements sometime prevent attendance in training activities.

15. The main reason for not taking courses are that our office does not have the money for it, the course fills up too quickly, the course is not in any field that would benefit me on the job, job conflicts with the course dates, and the level of the course is not right for me (examples, computer software courses--either too elementary or too advanced). The main reason is no money to pay for it. As an example of the latter, I wanted to take a particularly valuable course held in Hersey, PA that was put on by OPM, but our office simply did not have the money to send me--the course would have been of very high value to the job. Bottom line is no money, no training and as a result the agency loses.
16. Training opportunities are not announced in a timely manner to allow adequate planning for attendance.
17. As a member of MERS, I have noticed quite a few managerial courses offered at headquarters or sometimes the regions. We at MERS seem to fit in between and often are over-looked or just not included when various courses are offered/mentioned.

Comments From Section 3--Participation

1. Poor management is the greatest hazard FEMA faces. While general management training is adequate, advanced management training is totally inadequate. We get our managers to a certain point then disregard the need for further training. Simple individual assessments of management competencies are needed for all managers and supervisors. This assessment

could serve as the basis for rating the Professional Development criteria under the Performance Management System. FEMA could then offer courses on developing competencies through its existing training system. A one-week course could travel to each region or territory to provide the needed skills training. Managerial skills training could also be included at the DFOs. These approaches avoid the exorbitant prices for resident management training that only few can attend each year.

2. The primary reason is to gain knowledge and/or skills so I can do my job better and so the agency gets more out of me.

Chapter Summary

This chapter contained a demographic profile of the respondents to the study questionnaire along with an analysis of the 5 research questions posed in Chapter I. Additionally, this chapter included the written comments provided by the respondents.

The findings from the study suggest that FEMA managers consider cognitive interest and professional advancement to be the primary motivations for participation in training. The primary reasons for not participating center around lack of course relevance and time constraints. While there were some statistically significant differences in the relationships among demographic variables and participation and non-participation, most had relatively low correlations. Analyses of participants versus non-participants yielded little difference relative to age and noticeable differences relative to gender, assignment location, education level, and family income.

Chapter V contains further discussion of the results, the research process, and suggestions for future research.

CHAPTER V

CONCLUSIONS

This chapter contains a discussion of the implications of the results presented in Chapter IV, a discussion of the research process, and recommendations for further research in the area of adult education participation.

For several decades, researchers have been interested in the trends in adult education participation (Long, 1987, Abramson, 1997). That research interest focused on two aspects of participation: the characteristics of participants and the motivations of subjects to participate and not participate in adult education activities. Data from a wide variety of subjects has been obtained throughout the years, both from interviews (Houle, 1961) and from questionnaires (Boshier & Collins, 1985). The preponderance of participation research has centered on subjects from the private sector in businesses, organizations, and adults in communities at large; and has employed broad and diverse definitions of adults and adult education activities (Johnstone & Rivera, 1965, Long, 1987, Caffarella & Merriam, 1991). This study narrowed the focus of participation research to the motivation of managers in a Federal government agency.

Federal employees are unique when compared to the work force at large. They are one of the largest centrally managed work forces in the nation, whose functions affect the lives of most Americans. The Federal work force is governed by personnel policies that are subject to immense political influences and which appear to provide few tangible incentives to participate in training (Hyde, 1992). Whereas previous participation studies left a gap in examining the motivation of Federal government managers toward training, this study attempted to fill that gap

by examining the motivation of managers in the Federal Emergency Management Agency to participate in government-sponsored training.

In order to examine the motivation of managers in a Federal government agency to participate and not participate in training, the researcher developed a questionnaire using input from 3 questionnaires previously used in participation research. The questionnaire contained a section that addressed demographic information, a section that addressed reasons for participating in training, and a section that addressed reasons for not participating in training. The researcher distributed the questionnaire to managers and supervisors in the Federal Emergency Management Agency (FEMA) using the agency's electronic mail system.

Discussion of Results

The response rate for return of the questionnaires was 28.5%. Most of the respondents (approximately 80%) had participated in government-sponsored training. The overall participation rate at non-mandatory, professional development training for FEMA managers generally holds at 12% (R. Salter, personal communication, September 2, 1996). The questionnaire response rate could indicate several phenomena.

Perhaps most non-participant managers were embarrassed to admit they had not participated in training and therefore did not return the survey. Those same managers, as non-participants, may not have had an interest in the content of the questionnaire. The busiest managers may have thought they did not have time to complete the questionnaire. Possibly, managers who did complete the questionnaire were proud of the fact they had participated in training, and several expressed an interest in improving FEMA's training program.

As stated in Chapter III, the researcher was prohibited from identifying the questionnaire as part of a FEMA-sponsored effort. This action, the day before the questionnaire was to be distributed, may have affected the response rate. Once the researcher revealed the questionnaire as part of a doctoral study, a few comments were received questioning the authority under which the study was being performed. Identification of the study sponsor and authority to conduct the study had already been established by the researcher and FEMA officials; however, a single personality within the agency was able to intercede at the last minute.

The nature of an e-mail questionnaire itself also may have had an impact on the return rate. This issue is discussed further in the section on research process.

The data from the returned questionnaires was used to help answer the 5 research questions posed in Chapter I. This section of Chapter V will address the analysis of those research questions.

To facilitate analysis, the researcher grouped the questionnaire items that addressed participation into the clusters established by Boshier and Collins (1985) and grouped the items that addressed non-participation into the factors established by Darkenwald and Valentine (1985). The researcher then tested the reliability of each scale using Cronbach's alpha test. One participation cluster showed low reliability, social stimulation. This low reliability may indicate that the questionnaire items in that cluster had little relevance to participation motivation among Federal managers. Similarly, 2 non-participation factors indicated low reliability, lack of confidence and personal problems. This finding shows these factors were not important to high level government managers in their decisions not to participate in training.

Research Question 1--What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for participating in government-sponsored training?

The purpose of this question was to identify the top reasons managers posed for participating in training and to determine the level of importance those reasons actually held. Based on respondents' scores, the reasons for participation were rank ordered individually and in clusters derived from the literature. The clusters labeled cognitive interest and professional advancement were the most important to FEMA managers in their decision to participate in training.

After rank ordering all items, 7 items appeared to be significant reasons for participation in training. Of these 7 items, the following 3 were characterized by Boshier and Collins (1985) as *professional advancement items*: to increase my competence in my job, to secure professional advancement, and to meet some formal requirement. Two items were characterized as *cognitive interest items*: to seek knowledge for its own sake and to satisfy an inquiring mind. There was 1 *external expectations item*, to keep up with competition, and 1 *community service item*, to gain insight into human relationships.

That a mature group of managers would consider professional advancement, community service, and external expectations to be important reasons for participating in training is unsurprising. Professional advancement is a continuous goal of most members of the Federal workforce. To see that managers who have achieved a relatively high level in the civil service want to attend training to increase job competence is gratifying. However, managers may have provided such a response to a questionnaire because the answer was the politically correct response.

That a group of well-educated managers would participate in training because they have open, inquiring minds and want to obtain the knowledge that comes through education is also unsurprising. Whether or not there is a relationship between the knowledge to be gained and job competence and advancement can only be surmised at this point. Obviously, keeping up with competition is an integral part of professional advancement.

The relatively high rating of these items corresponds to previous findings that job-related aspirations (Johnstone & Rivera, 1965) and cognitive interest items (Morstain & Smart, 1974) were of greatest importance to adult learners.

The Federal Emergency Management Agency is an agency that helps State and local governments provide relief to victims of disasters. As such, its managers would naturally tend toward a community service orientation, particularly since the agency Director has placed emphasis on partnerships with communities across the nation and has made the fostering of such partnerships a primary mission of FEMA.

Based on a desire to learn and a relationship between that learning and professional advancement, participation in training could be increased if a visible and practical linkage were established between training attendance and advancement. Keep in mind that in the civil service, promotion in grade is not determined by training completed. However, other forms of professional advancement such as job assignments in the agency and even the physical location of offices can be viewed as advancement.

For adult education practitioners, particularly those who train the Federal workforce, linking the design of a course or program to some form of professional advancement or being able to demonstrate how training will enhance the students' professional competence may be

useful. Being able to relate community service to the managers assigned to FEMA is a relatively easy task. Practitioners in other agencies may have to search for such a linkage. Practitioners can perhaps best satisfy inquiring minds by ensuring the training content is factual and relevant to what the learners expect.

Research Question 2--What are the relationships between the demographic variables of age, gender, education level, geographic location of assignment, and family income and the reasons cited for participating in government-sponsored training?

The purpose of this question was to determine if possible significant differences in motivation of managers to participate in training were related to demographic variables. If significant differences did exist, FEMA managers could exploit successful environmental characteristics within the agency to foster participation. Additionally, adult education practitioners in the Federal government could use this information to adjust the design and presentation of training to meet the needs of specific groups and to adjust the way training is advertised throughout the agency.

Gender

No statistically significant differences appeared in the importance of reasons for participation between the men and women respondents in this study. At the managerial level, both men and women view similarly motivation towards participation in training. This finding is not meant to imply men and women have the same opportunity to attend training, but simply that their reasons for wanting to attend exhibit little difference. This finding implies that the education practitioner need not alter course design or conduct based on different motivations of men and women to attend the training.

Assignment Location

There were 3 reasons for participation that differed in importance based on assignment location. The reason *to acquire knowledge that will help me with other educational courses* was more important to those assigned out of the Washington, D.C., area (a Regional Office or Other) than to those in the headquarters, NETC, or Mount Weather. This finding implies that those people in the Regional Offices and elsewhere are taking other courses and consider other course offerings to be beneficial to their overall professional education. This finding also may imply that managers outside the nation's capital view education as continuous and progressive, not a single course of instruction.

The other two items which were significant for this variable also were significant within the community service cluster. *To become a more effective citizen* was not considered an important reason for participation by those assigned to the Headquarters or a Regional Office. However, those individuals assigned to NETC, Mount Weather, and Other considered this reason a relatively important one for participation. This difference may be attributed to the characteristics of the actual geographic locations. The Headquarters and Regional Offices tend to be located in or near larger cities. On the other hand, the NETC, Mount Weather, and Other locations are more rural and perhaps more closely associated with small town environments and closer community relationships. This inference does not imply a lack of citizenship on the part of those in the Headquarters and Regional Offices but perhaps greater community involvement in the less populated areas. Because of their proximity to the nation's capital, those individuals assigned to the Headquarters may not perceive a need to attend training to become more effective citizens.

Those participants assigned to the NETC considered *to prepare for service to the community* an important reason for participation in training. Those participants assigned to other locations did not. This difference may be attributable to the mission and functions of the NETC. The NETC provides emergency management instruction for a wide-ranging audience from the Federal, State, local, and private sectors. The broad purpose of that instruction is to prepare emergency management officials for service to the community. This finding may also indicate a perception that those assigned elsewhere who regularly participate in disaster relief are already serving the community and training would not enhance that service.

Apparently managers farther away from the mainstream offices (Headquarters and Regional Offices) place greater importance on community service as a motivation to participate in training. When designing and conducting training, practitioners may consider establishing linkages between the content of the training and the value such training may have in improving service to the community.

Age

Four of the reasons for participation showed a mid-level positive relationship with age, indicating an increase in importance of the reasons with an increase in age. Although most age groups considered the reason *to acquire knowledge that will help me with other educational courses* to be of little importance, those persons who rated this item as important were at the top end of the age spectrum. This finding perhaps indicates that the more mature manager looks at the overall education picture, beyond the immediate training course in question.

To become more effective as a citizen was considered a more important reason for participation in training by those 54 to 63 years of age. This result may indicate a greater desire on the part of the more mature managers to become better citizens--an issue of values.

Those few respondents who considered *to provide a contrast to my previous education* an important reason for participation were also at the higher end of the age spectrum. This finding was perhaps due to the undeniable fact that their previous education spanned a greater number of years than the younger managers.

To maintain or improve my social position was rated as unimportant by all respondents. The positive correlation with age was simply because 7% of the respondents rating the item a 2 were older than the 93% who rated the item a 1. Statistically this result showed a positive correlation with age. Practically, however, this item was not an important reason for participation for any age group.

Consider that even though these 4 items displayed a statistically significant relationship with age, each was rated relatively unimportant in the decision to participate in training. The variable of age did show a mid-level positive correlation with the community service cluster, which included the reason *to become more effective as a citizen*, discussed above. This result could be an indicator that older managers have more extrinsic concerns than do the younger managers.

Education Level

A mid-level negative relationship between education level and the professional advancement cluster occurred. This result would indicate that as education level increased, professional advancement was less important in the decision to participate in training. This

finding may indicate that those who market or advertise training programs would want to emphasize cognitive interest reasons for participation when targeting government managers with a higher education level.

The one reason that indicated a significant correlation between education level and the reasons for participation fell within the professional advancement cluster. This item, *to supplement a narrow previous education*, showed a modest negative relationship with the education level of the respondents. Unsurprisingly the more highly educated individuals would not participate in training to supplement a narrow previous education. Also those who were more highly educated would be unlikely to admit to a narrow previous education even if true.

Family Income

No statistically significant differences appeared in the importance of reasons for participation among the different levels of family income in this study. Financial considerations associated with participation in training by Federal government employees appear not to be related to personal income. This conclusion is probably because most if not all training would be funded by the government organization, not the employee. Any incidental expenses associated with participation were statistically unimportant. When designing manager training for the government employee, practitioners need not be concerned with family income factors other than to mitigate additional incidental financial burdens associated with travel, billeting, and meals.

Research Question 3--What is the relative importance of the reasons managers in the Federal Emergency Management Agency cite for not participating in government-sponsored training?

The purpose of this question was to identify the top reasons managers posed for not participating in government-sponsored training and to determine the level of importance those

reasons actually held. After rank ordering all items, no items appeared to be of noticeable influence to respondents in their decision not to participate in training. When the reasons were grouped into the factors established by Darkenwald and Valentine (1985), lack of course relevance and time constraints appeared to have the greatest influence on managers' motivation not to participate in training.

Lack of course relevance would be an expected barrier to participation for a group of well-educated managers. Additionally, this finding coincides with one of the assumptions of andragogy proposed by Knowles (1973), that is, adult learners seem to demand course content be relevant to their work, home, or leisure time environment. Most managers would claim to be too busy to spend time in a course that had no relevance. An issue raised by this finding is "to what must the course be relevant?" Considering the top reasons for participation identified in research question 1, relevance may have a direct relationship with the items included in the professional advancement cluster. Lack of course relevance may address how a course will contribute to job competence or status. On the other hand, relevance may have nothing to do with course content. As suggested by Quick (1991), "interest in management training in the more experienced manager often has more to do with where the sessions are held than what they deliver--Florida in the winter, California, or New York City" (p. 69).

The implications of this finding for practitioners fall into two areas: content and marketing. If lack of relevance is a significant barrier to participation, the course developer must conduct a needs or interest analysis for the proposed audience to establish a frame of relevance. Course developers must consider whose needs are to be met, and how to translate those needs into course content perceived by the audience as relevant. Secondly, in marketing a course or

program of instruction, care must be taken both to package and advertise the course so that potential participants will see how the course will meet their needs.

Perhaps nothing is more precious to a manager, particularly those in the government service, as time. Consequently, the factor of time constraints ranked highly as a barrier to participation. In fact, Darkenwald and Valentine (1985) found time constraints to be the leading factor in their study of deterrents to participation. This constraint may be particularly true in an agency such as FEMA, where work time is often determined by the vagaries of nature and natural disasters.

This time constraint factor is currently being addressed in large part through the application of technology and computer-based training. By developing and presenting courses "on line," practitioners have done much to remove the barriers of inconvenient time and inconvenient location associated with the time constraint factor. Additionally, asynchronous computer-based training enables students to receive training according to individual schedules. Recognizing the importance of this factor, practitioners ought to continue to find training innovations that will mitigate the barrier of time constraints.

Research Question 4--What are the relationships between demographic variables and reasons for non-participation?

The purpose of this question was to determine if the reasons for not participating in government-sponsored training differed significantly when compared with the demographic characteristics of the respondents. Armed with this information, FEMA managers could establish needed strategies to mitigate any biases that may exist. Additionally, adult education

practitioners in the Federal government could use this information to tailor the course content, presentation methods, scheduling, and location of training to better meet the needs of managers.

Gender

The only reason for non-participation that displayed a statistically significant difference for men and women fell in the time constraints factor. More women than men indicated that not being able to regularly attend training was a barrier to participation. That women are working any more or less number of hours at the workplace than are men is unlikely, but this finding may indicate that women believe their activities outside the work place contribute to the time constraints that form a barrier to participation. Overall, however, gender appeared to have little effect on the importance of the reasons for not participating in training.

Assignment Location

Two of the 3 items that displayed a statistically significant difference in reasons for non-participation based on assignment location also were among the top 5 reasons overall, as indicated in Table 17. These were items 38, *I didn't think the course would meet my needs* and 18, *I didn't know about courses available*.

Managers assigned to the headquarters were concerned that courses would not meet their needs to a degree greater than those assigned elsewhere. Why this would be so is difficult to interpret. Managers assigned to the headquarters would be expected to have greater access to training, primarily due to proximity to courses offered in the Washington, D.C., area. However, this finding may indicate a need for reassessing the content and design of management training programs offered to headquarters personnel.

Knowledge of courses available seemed to be an issue for all managers except those assigned to a Regional Office. This finding would indicate that either the Regional Directors and their staffs are doing a good job of keeping their managers informed or managers assigned to the Regional Offices are not that interested in training. The demographic characteristics portrayed in Table 30 would indicate the former to be true.

The red tape involved in course enrollment probably increases the farther from the headquarters managers are assigned. The responses to item 45 held that to be true. This finding has implications for practitioners who administer enrollment processes, particularly those who deal with a geographically dispersed audience.

Age

Analysis of this variable indicated that as age increased, so did the concern that the respondent was unprepared for the training offered. However, the low correlation coefficient for this item (33) and the fact that only the 2 oldest respondents rated this item above the rating of 1 shows little concern on the part of most managers. No other differences for non-participation were based on age. Notice, however, that most respondents were clustered between 45 and 55 years of age.

Education Level

Five items indicated significant relationship between education level and barriers to participation. Three of these 5 were included in the personal priority factor; however, the correlation between education level and low personal priority was extremely low.

Analysis of item 14, *the courses available did not seem interesting*, showed greater importance to managers more highly educated. Apparently those managers at a higher education

level expect more from training. Perhaps managers judge whether or not a course is interesting by the title and course synopsis and by peer critiques. This finding may indicate to practitioners that participation may be impacted by how courses are titled and advertised.

Willingness to give up leisure time, although statistically significant, was not much of an issue with respondents. This finding is most likely because government-sponsored training is generally conducted during work hours and would have little-to-no effect on leisure time.

Family Income

Those managers at the higher income levels (above \$100,000) indicated greater concern that participation in training would take away from time with their family. At first this concern appears to be artificial, in that government-sponsored training is generally conducted during work hours. However, the training offered to senior managers who would be at the higher end of the pay scale may entail an extended training period at locations away from the office. This training could interfere with family activities. Agency management or training practitioners would be unable to do much to mitigate this barrier to participation. The higher level management courses are considered prestigious, and training professionals believe they should not be broken into smaller courses (Quick, 1991).

Research Question 5--How do participants and non-participants compare with respect to demographic variables?

Respondents were characterized as participants or non-participants depending upon whether or not they completed Section 3 of the questionnaire, dealing with reasons for not participating in training. Thirty-two were participants and 8 were non-participants.

Managers' age appeared to have little impact upon whether they participated in training or not. This fact is more than likely due to the relatively narrow range of ages of the respondents.

The percentage of male participants was noticeably greater than the percentage of female participants. Approximately 84% of male respondents were participants while approximately 67% of the female respondents were participants. The motivation to participate and not participate showed little difference between genders. The preponderance of male participants may indicate a bias toward male managers on the availability of training and the opportunity to participate. If further study yields similar results, FEMA management may need to examine the process by which training allocations are made in the agency.

Most of the participants were assigned either to the FEMA Headquarters (56%) or to a Regional Office (22%). This fact would reinforce the expectation and finding that managers closest to the mainstream operations have greater access to training and less red tape in enrolling.

Several previous studies of adult education participation have found that personnel with a higher education level tend to continue participation in adult education activities (Darkenwald & Merriam, 1982, Long, 1987). The government manager participating in government-sponsored training also is more likely to continue participation. The level of participation was greater for those who had a 4-year college education than for those who did not. This finding could prompt agency management and training practitioners to ensure managers with a relatively lower education level are not avoiding training that they ought to be attending.

The level of participation increased as family income increased. This finding conflicts with that found by Anderson and Darkenwald (1979) but is in consonance with that presented by

Long (1987). Any findings directly relating income level with participation of government managers participating in government-sponsored training are suspect because government-sponsored training incurs little if any cost to the participant.

Respondent Comments

The comments provided by respondents generally fell into two broad categories and were mostly negative in tone: funds available for training and the processes used to manage training allocations and enrollment. These comments have several implications for FEMA management and adult education practitioners.

The many comments received concerning the lack of training funds may invite 2 inferences. First, managers truly are interested in attending training or they would not lament the lack of funds. Second, those individuals in a position to allocate funds consider other requirements to be of higher priority than manager training.

Managers outside of the Washington, D.C., area especially need the opportunity to enroll in training. This effort would include better advertising of courses available, increased lead time for enrollment, and putting increased quality control on the enrollment process. This finding may also indicate a need for innovative distance learning delivery systems.

Summary

As suggested by Darkenwald and Valentine (1985), item means were calculated to identify the strongest positive and negative participation motivations. This procedure yielded the results discussed above. Several of the findings in this study concerning the relationship of demographic variables to reasons for participation and non-participation were not as powerful as other researchers have found. This result may be an indicator that Federal government managers'

participation and non-participation motivations are, in fact, different from those of the population at large. The relatively low response rate to the questionnaire also may have limited the quantitative method used in this study.

Discussion of the Research Process

This section of Chapter V includes a discussion of the lessons learned during the research process for this study. This section is provided to assist adult education practitioners and those who may elect to conduct a similar study in the hope these lessons will contribute to the body of knowledge on participation research and provide insights that will facilitate further research in this area. This section focuses on two aspects of this study: the use of electronic mail (e-mail) to distribute questionnaires and the use of a government agency for study subjects.

While not discounting the value of theory, this study sought to provide practical suggestions to enhance participation in adult education, particularly that conducted for managers in the Federal government. Or, as stated by Jacobson (1998), "...as a practitioner seeking to improve my practice, my entire reason for conducting research is to determine a course of action..." (p. 128).

The researcher linked instruments that had been used in previous adult education research with subjects in a Federal government agency. The method of distributing the instruments used in this study was different from previous studies, in that agency e-mail was the distribution media. This presented notable advantages and disadvantages. The speed and efficiency of e-mail make it an enticing vehicle for a researcher. A questionnaire can be sent to a number of subjects almost instantaneously, with the potential to receive responses almost as quickly. However, e-mail systems are not totally reliable and the only sure way to determine if the system

successfully distributed the questionnaire is to solicit a receipt from each subject. This feedback can usually be received through configuration of the e-mail system. Although not used by the researcher, sophisticated software systems can be used to design a questionnaire, extract the responses, and process the data. The system encountered by the researcher, Survey Tracker, was prohibitively expensive (\$10,000) and had severe licensing restrictions.

Perhaps the greatest disadvantage of using e-mail to distribute a questionnaire concerns the issues of anonymity and confidentiality. While confidentiality can be ensured through the actions of an honest researcher, anonymity is difficult if not impossible to achieve using e-mail. This factor may cause study subjects to be reluctant to respond, resulting in a less than desired response rate. To mitigate this concern, the researcher offered subjects the option of returning the questionnaire in hard copy via agency mail. Few elected to use this option.

An unknown factor in the use of e-mail surveys is the fear that some subjects may have of making a technical mistake in responding. Such a mistake could be broadcast throughout the e-mail system, causing great embarrassment. To simply delete the questionnaire and move on to another project may be easier. The researcher first designed a questionnaire that had relatively complicated instructions on how to respond. This questionnaire was replaced with a less sophisticated layout, but one more "user friendly" to the subjects. Researchers who use e-mail surveys are advised to set up a unique e-mail address from which to send and receive mail. This technique will help to separate daily business from study responses.

The second aspect discussed in this section concerns the conduct of research in a government agency. The researcher for this study was in a unique position relative to the agency from which the subjects were drawn. As a member of the private sector with contracts with

FEMA, the researcher ensured there was no conflict of interest between the contractual work and this study by seeking and receiving written permission from the agency's General Counsel to conduct the study using government facilities. Additionally, verbal approval and sponsorship of the study was obtained from the Chief, Training Division, approximately one year prior to distribution of the questionnaire. In retrospect, this approval should have been obtained in writing, or as an alternative, an actual contract drawn up for the work to be accomplished.

The loss of sponsorship, the day before the questionnaire was to be distributed, proved to be detrimental to the study. Not unexpectedly, a few subjects questioned the legitimacy of the survey effort and the use of the data. Even after the effort was identified as part of a doctoral study, one respondent commented that had she known the survey was for a dissertation, she would not have responded. The researcher suggests that a study involving a government agency conducted by someone outside government should be a contractual effort.

A final suggestion links the instrument with the government audience. The researcher believes that the length of the instrument used in this study may have adversely affected the managers' desire to complete and return the questionnaire. Time constraints were identified as a major consideration in the participation decision. Completing an eighty-seven item questionnaire may have infringed upon that constrained time. Further participation research in Federal government agencies should be reduced in scope to either participation or non-participation, but not both simultaneously.

The lessons learned from this study, coupled with the strategies suggested should enhance future adult education participation research. Recommendations for such research are presented in the following section.

Recommendations for Further Research

Findings from this study suggested lack of course relevance and time constraints were the primary motivations for managers not to participate in government-sponsored training. To develop a baseline upon which to gauge and define relevance in the context of the manager in a Federal government agency would be useful. To identify the situational, institutional, and dispositional elements that seem to constrain the time of managers and inhibit their motivation to participate in training also would be helpful.

The participation rate of male and female managers in this study was noticeably different. This finding suggests a need for further participation research concerning gender issues among Federal government managers.

Several of the relationships of demographic variables to reasons for participation and non-participation were not as powerful as other researchers have found. This finding may be an indicator that Federal government managers' participation motivations are, in fact, different from those of the population at large. To test this idea, further participation research should be conducted across a broader range of subjects selected from a variety of Federal government agencies. An increased number of subjects would enable a researcher to obtain a more powerful result through factor analysis.

Qualitative research methods also should be considered to more clearly define the organizational climate within which participation decisions are being made and to more clearly define the reasons for participation and non-participation.

Finally, further research should be conducted on how to exploit state-of-the-art technology in the conduct of survey research, with a focus on resolving the issues raised in the discussion of the research process.

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APPENDIX A
QUESTIONNAIRE

HIT THE [REPLY] BUTTON NOW, THEN [REPLY TO SENDER WITH ORIGINAL MESSAGE]! THEN CONTINUE.

OVERVIEW: This questionnaire is being sent to managers and supervisors in FEMA to identify the primary reasons why they choose to participate or not participate in government-sponsored training since becoming a manager or supervisor. Your input will help to improve how training programs for managers and supervisors are designed, how they are offered, and assess the climate within which decisions to enroll or not to enroll are made.

It shouldn't take you more than 15 minutes to complete the questionnaire. A response no later than March 23, 1998, would be appreciated. Your response will be extracted from this message and will be confidential.

INSTRUCTIONS: Everyone should complete Section 1 and Section 2. Complete Section 3 if you have participated in government-sponsored training since becoming a manager or supervisor. Type number answers to the left of the <<; text answers to the right of the >>.

SECTION 1: Please answer the following questions about yourself by typing the appropriate number or text.

1. For how many years have you been a manager or supervisor?

<<Type answer here

2. What is your gender? 0=male; 1=female

<<Type answer here

3. What is your age?

<<Type answer here

4. What is your highest education level:

- 1=High School
- 2=Associate Degree
- 3=Bachelor's Degree
- 4=Master's Degree
- 5=Doctoral Degree

<<Type answer here

<<Type answer here

15. Because the course was offered at an inconvenient location
Not important 1 2 3 4 5 Very important

<<Type answer here

16. Because I couldn't afford the registration or course fees
Not important 1 2 3 4 5 Very important

<<Type answer here

17. Because I felt I was too old to take the course
Not important 1 2 3 4 5 Very important

<<Type answer here

18. Because I didn't know about courses available
Not important 1 2 3 4 5 Very important

<<Type answer here

19. Because of the amount of time required to finish the course
Not important 1 2 3 4 5 Very important

<<Type answer here

20. Because the course was scheduled at an inconvenient time
Not important 1 2 3 4 5 Very important

<<Type answer here

21. Because my family did not encourage participation
Not important 1 2 3 4 5 Very important

<<Type answer here

22. Because of transportation problems
Not important 1 2 3 4 5 Very important

<<Type answer here

23. Because the courses available were of poor quality
Not important 1 2 3 4 5 Very important

<<Type answer here

24. Because I was not confident of my learning ability
Not important 1 2 3 4 5 Very important

<<Type answer here

25. Because of family problems
Not important 1 2 3 4 5 Very important

<<Type answer here

26. Because I'm not that interested in taking courses
Not important 1 2 3 4 5 Very important

<<Type answer here

27. Because participation would take away from time with my family
Not important 1 2 3 4 5 Very important

<<Type answer here

28. Because I had trouble arranging for child care
Not important 1 2 3 4 5 Very important
<<Type answer here
29. Because the available courses did not seem useful or practical
Not important 1 2 3 4 5 Very important
<<Type answer here
30. Because I wasn't willing to give up my leisure time
Not important 1 2 3 4 5 Very important
<<Type answer here
31. Because the course was offered in an unsafe area
Not important 1 2 3 4 5 Very important
<<Type answer here
32. Because education would not help me in my job
Not important 1 2 3 4 5 Very important
<<Type answer here
33. Because I felt unprepared for the course
Not important 1 2 3 4 5 Very important
<<Type answer here
34. Because I couldn't afford miscellaneous expenses like travel, books, etc.
Not important 1 2 3 4 5 Very important
<<Type answer here
35. Because the course was not on the right level for me
Not important 1 2 3 4 5 Very important
<<Type answer here
36. Because I didn't think I could attend regularly
Not important 1 2 3 4 5 Very important
<<Type answer here
37. Because my employer would not provide financial assistance or reimbursement
Not important 1 2 3 4 5 Very important
<<Type answer here
38. Because I didn't think the course would meet my needs
Not important 1 2 3 4 5 Very important
<<Type answer here
39. Because I prefer to learn on my own
Not important 1 2 3 4 5 Very important
<<Type answer here
40. Because my friends did not encourage my participation
Not important 1 2 3 4 5 Very important
<<Type answer here

41. Because there was no place I could study or practice
Not important 1 2 3 4 5 Very important
<<Type answer here
42. Because it would interfere with my home responsibilities
Not important 1 2 3 4 5 Very important
<<Type answer here
43. Because it would interfere with my job responsibilities
Not important 1 2 3 4 5 Very important
<<Type answer here
44. Because there is no way to get credit towards a degree
Not important 1 2 3 4 5 Very important
<<Type answer here
45. Because there is too much red tape in getting enrolled
Not important 1 2 3 4 5 Very important
<<Type answer here
46. Because incentives for further training are not obvious or don't exist
Not important 1 2 3 4 5 Very important
<<Type answer here
47. Because my supervisor didn't encourage or enable my participation
Not important 1 2 3 4 5 Very important
<<Type answer here
48. Other:>>

SECTION 3: Complete this section only if you have wanted to enroll, tried to enroll, or actually enrolled in a government-sponsored training course or program since becoming a manager or supervisor. For each item below, please type the number that indicates how much influence that item had on your desire to participate in training. If an item seems irrelevant, just type "1" and move on, but please address each item. You may add items at the end of the list.

50. To seek knowledge for its own sake
No influence 1 2 3 4 Much influence
<<Type answer here
51. To share a common interest with a co-worker or a friend
No influence 1 2 3 4 Much influence
<<Type answer here
52. To secure professional advancement
No influence 1 2 3 4 Much influence
<<Type answer here
53. To become more effective as a citizen
No influence 1 2 3 4 Much influence

<<Type answer here

54. To get relief from boredom
No influence 1 2 3 4 Much influence
<<Type answer here

55. To carry out the recommendation of some authority
No influence 1 2 3 4 Much influence
<<Type answer here

56. To satisfy an inquiring mind
No influence 1 2 3 4 Much influence
<<Type answer here

57. To be accepted by others
No influence 1 2 3 4 Much influence
<<Type answer here

58. To give me higher status in my job
No influence 1 2 3 4 Much influence
<<Type answer here

59. To supplement a narrow previous education
No influence 1 2 3 4 Much influence
<<Type answer here

60. To stop myself from becoming mentally stagnant
No influence 1 2 3 4 Much influence
<<Type answer here

61. To acquire knowledge that will help me with other educational courses
No influence 1 2 3 4 Much influence
<<Type answer here

62. To fulfill a need for personal associations and friendships
No influence 1 2 3 4 Much influence
<<Type answer here

63. To keep up with competition
No influence 1 2 3 4 Much influence
<<Type answer here

64. To escape the intellectual narrowness of my occupation
No influence 1 2 3 4 Much influence
<<Type answer here

65. To participate in group activity
No influence 1 2 3 4 Much influence
<<Type answer here

66. To increase my competence in my job
No influence 1 2 3 4 Much influence
<<Type answer here

67. To gain insight into myself and my personal problems
No influence 1 2 3 4 Much influence
<<Type answer here

68. To help me earn a degree, diploma, or certificate
No influence 1 2 3 4 Much influence
<<Type answer here

69. To escape television
No influence 1 2 3 4 Much influence
<<Type answer here

70. To prepare for service to the community
No influence 1 2 3 4 Much influence
<<Type answer here

71. To gain insight into human relationships
No influence 1 2 3 4 Much influence
<<Type answer here

72. To have a few hours away from responsibilities
No influence 1 2 3 4 Much influence
<<Type answer here

73. To learn for the joy of learning
No influence 1 2 3 4 Much influence
<<Type answer here

74. To become acquainted with congenial people
No influence 1 2 3 4 Much influence
<<Type answer here

75. To provide a contrast to the rest of my life
No influence 1 2 3 4 Much influence
<<Type answer here

76. To get a break in the routine of home and work
No influence 1 2 3 4 Much influence
<<Type answer here

77. To improve my ability to serve mankind
No influence 1 2 3 4 Much influence
<<Type answer here

78. To keep up with others
No influence 1 2 3 4 Much influence
<<Type answer here

79. To improve my social relationships
No influence 1 2 3 4 Much influence
<<Type answer here

80. To meet some formal requirements
No influence 1 2 3 4 Much influence
<<Type answer here
81. To maintain or improve my social position
No influence 1 2 3 4 Much influence
<<Type answer here
82. To provide a contrast to my previous education
No influence 1 2 3 4 Much influence
<<Type answer here
83. To comply with the suggestions of someone else
No influence 1 2 3 4 Much influence
<<Type answer here
84. To learn just for the sake of learning
No influence 1 2 3 4 Much influence
<<Type answer here
85. To make new friends
No influence 1 2 3 4 Much influence
<<Type answer here
86. To comply with instructions from someone else
No influence 1 2 3 4 Much influence
<<Type answer here
87. Other:>>

GOOD JOB!!! Now hit the [SEND] button.

SECOND NOTICE TO SUBJECTS

EXPLANATION: This message further explains the manager/supervisor training survey you received on March 12th.

1. This is a dual use survey. The survey is an independent effort by a colleague using it as the basis for a doctoral dissertation. Second, FEMA will be able to use the study to improve our manager training programs.
2. Yes, the survey is a little long. The instrument has been used in other studies and is being used here in order to compare government managers to the public at large. That also accounts for the need for some personal data. All responses are confidential.
3. Thanks to those who have replied to the survey. For those who haven't, a few moments of your time really would be appreciated. Just follow the instructions below. If you feel uncomfortable about responding via cc-mail, print out the survey, complete it, and send it agency mail to Mr. Duane Baltz,

Analysis and Design Branch, Training Division, PT&E Directorate, FEMA HQ, Room 629. A response no later than April 3d would be appreciated.

APPENDIX B

TABLES--RELATIONSHIP OF DEMOGRAPHIC VARIABLES WITH REASONS FOR PARTICIPATION

Table B-1

Relationship of Gender with Reasons for Participation

Item	Reason for Participation	Chi-square Statistic	Significant Differences
66	To increase my competence in my job	6.09	No
52	To secure professional advancement	.86	No
50	To seek knowledge for its own sake	3.89	No
71	To gain insight into human relationships	6.96	No
80	To meet some formal requirements	3.30	No
63	To keep up with competition	1.64	No
56	To satisfy an inquiring mind	2.74	No
58	To give me higher status in my job	.91	No
78	To keep up with others	6.85	No
60	To stop myself from becoming mentally stagnant	1.95	No
55	To carry out the recommendation of some authority	2.84	No
59	To supplement a narrow previous education	4.36	No
84	To learn just for the sake of learning	4.95	No
73	To learn for the joy of learning	5.48	No
61	To acquire knowledge that will help me with other educational courses	4.93	No
86	To comply with instructions from someone else	.80	No
77	To improve my ability to serve mankind	2.81	No
53	To become more effective as a citizen	1.80	No
51	To share a common interest with a co-worker or a friend	.79	No
83	To comply with the suggestions of someone else	1.72	No
70	To prepare for service to the community	.59	No
67	To gain insight into myself and my personal problems	2.71	No
82	To provide a contrast to my previous education	.97	No
64	To escape the intellectual narrowness of my occupation	3.97	No

68	To help me earn a degree, diploma, or certificate	1.40	No
65	To participate in group activity	.29	No
79	To improve my social relationships	1.57	No
75	To provide a contrast to the rest of my life	1.92	No
62	To fulfill a need for personal associations and friendships	3.79	No
76	To get a break in the routine of home and work	.69	No
85	To make new friends	.69	No
72	To have a few hours away from responsibilities	.23	No
54	To get relief from boredom	.64	No
74	To become acquainted with congenial people	.69	No
57	To be accepted by others	.69	No
81	To maintain or improve my social position	.45	No
69	To escape television	0.00	No

Table B-2

Relationship of Assignment Location with Reasons for Participation

Item	Reason for Participation	Chi-square Statistic	Significant Differences
66	To increase my competence in my job	6.48	No
52	To secure professional advancement	18.69	No
50	To seek knowledge for its own sake	9.05	No
71	To gain insight into human relationships	11.91	No
80	To meet some formal requirements	11.72	No
63	To keep up with competition	8.63	No
56	To satisfy an inquiring mind	19.69	No
58	To give me higher status in my job	10.59	No
78	To keep up with others	12.72	No
60	To stop myself from becoming mentally stagnant	14.52	No
55	To carry out the recommendation of some authority	12.90	No
59	To supplement a narrow previous education	13.99	No
84	To learn just for the sake of learning	11.83	No
73	To learn for the joy of learning	14.39	No
61	To acquire knowledge that will help me with other educational courses	22.85	Yes
86	To comply with instructions from someone else	10.76	No
77	To improve my ability to serve mankind	20.99	No
53	To become more effective as a citizen	24.39	Yes
51	To share a common interest with a co-worker or a friend	12.09	No
83	To comply with the suggestions of someone else	12.85	No
70	To prepare for service to the community	25.40	Yes
67	To gain insight into myself and my personal problems	10.95	No
82	To provide a contrast to my previous education	19.17	No
64	To escape the intellectual narrowness of my occupation	14.83	No
68	To help me earn a degree, diploma, or certificate	16.73	No
65	To participate in group activity	10.97	No
79	To improve my social relationships	13.66	No
75	To provide a contrast to the rest of my life	12.48	No
62	To fulfill a need for personal associations and friendships	15.63	No
76	To get a break in the routine of home and work	7.86	No

85	To make new friends	3.38	No
72	To have a few hours away from responsibilities	1.69	No
54	To get relief from boredom	7.01	No
74	To become acquainted with congenial people	1.78	No
57	To be accepted by others	4.48	No
81	To maintain or improve my social position	14.34	No
69	To escape television	0.00	No

Table B-3

Relationship of Age with Reasons for Participation

Item	Reason for Participation	Correlation Coefficient	Level of Significance
66	To increase my competence in my job	.0949	.548
52	To secure professional advancement	.1180	.423
50	To seek knowledge for its own sake	.0354	.807
71	To gain insight into human relationships	.0029	.984
80	To meet some formal requirements	.2008	.184
63	To keep up with competition	.1737	.247
56	To satisfy an inquiring mind	-.0309	.837
58	To give me higher status in my job	.1059	.481
78	To keep up with others	.0638	.677
60	To stop myself from becoming mentally stagnant	.1568	.287
55	To carry out the recommendation of some authority	.1049	.491
59	To supplement a narrow previous education	.2531	.092
84	To learn just for the sake of learning	-.0095	.950
73	To learn for the joy of learning	.0345	.819
61	To acquire knowledge that will help me with other educational courses	.3041	*.043
86	To comply with instructions from someone else	-.1012	.505
77	To improve my ability to serve mankind	.2704	.074
53	To become more effective as a citizen	.3883	*.008
51	To share a common interest with a co-worker or a friend	.1234	.414
83	To comply with the suggestions of someone else	-.0176	.909
70	To prepare for service to the community	.2019	.189
67	To gain insight into myself and my personal problems	-.1959	.210
82	To provide a contrast to my previous education	.3094	*.048
64	To escape the intellectual narrowness of my occupation	.1941	.218
68	To help me earn a degree, diploma, or certificate	.3003	.052
65	To participate in group activity	.0976	.543
79	To improve my social relationships	.2043	.200
75	To provide a contrast to the rest of my life	.0997	.541
62	To fulfill a need for personal associations and friendships	.0501	.751
76	To get a break in the routine of home and work	-.1677	.298

85	To make new friends	.1318	.413
72	To have a few hours away from responsibilities	-.2332	.145
54	To get relief from boredom	-.0861	.580
74	To become acquainted with congenial people	.0000	N/A
57	To be accepted by others	-.0146	.929
81	To maintain or improve my social position	.3353	*.040
69	To escape television		

Table B-4

Relationship of Education Level with Reasons for Participation

Item	Reason for Participation	Correlation Coefficient	Level of Significance
66	To increase my competence in my job	-.0977	.564
52	To secure professional advancement	.0817	.599
50	To seek knowledge for its own sake	.1575	.303
71	To gain insight into human relationships	.1635	.302
80	To meet some formal requirements	-.0711	.660
63	To keep up with competition	-.0793	.620
56	To satisfy an inquiring mind	.2746	.085
58	To give me higher status in my job	.1620	.312
78	To keep up with others	-.0497	.761
60	To stop myself from becoming mentally stagnant	-.1250	.428
55	To carry out the recommendation of some authority	.1700	.296
59	To supplement a narrow previous education	-.3609	*.024
84	To learn just for the sake of learning	.0639	.693
73	To learn for the joy of learning	.0602	.708
61	To acquire knowledge that will help me with other educational courses	-.2809	.081
86	To comply with instructions from someone else	.2101	.195
77	To improve my ability to serve mankind	-.0136	.933
53	To become more effective as a citizen	.0178	.909
51	To share a common interest with a co-worker or a friend	-.0383	.810
83	To comply with the suggestions of someone else	.1429	.384
70	To prepare for service to the community	.0624	.704
67	To gain insight into myself and my personal problems	.1974	.235
82	To provide a contrast to my previous education	-.2273	.174
64	To escape the intellectual narrowness of my occupation	-.0171	.919
68	To help me earn a degree, diploma, or certificate	-.2074	.210
65	To participate in group activity	.0393	.819
79	To improve my social relationships	-.1340	.432
75	To provide a contrast to the rest of my life	-.1351	.438
62	To fulfill a need for personal associations and friendships	-.2473	.144
76	To get a break in the routine of home and work	.1875	.276

85	To make new friends	-.2263	.189
72	To have a few hours away from responsibilities	-.0716	.676
54	To get relief from boredom	.1944	.245
74	To become acquainted with congenial people	.0524	.764
57	To be accepted by others	.2554	.143
81	To maintain or improve my social position	.0944	.588
69	To escape television	.0000	N/A

Table B-5

Relationship of Family Income with Reasons for Participation

Item	Reason for Participation	Correlation Coefficient	Level of Significance
66	To increase my competence in my job	.0000	1.000
52	To secure professional advancement	.1542	.362
50	To seek knowledge for its own sake	.1573	.345
71	To gain insight into human relationships	-.1094	.521
80	To meet some formal requirements	-.2152	.207
63	To keep up with competition	-.1113	.510
56	To satisfy an inquiring mind	.0316	.851
58	To give me higher status in my job	.0358	.832
78	To keep up with others	-.1200	.487
60	To stop myself from becoming mentally stagnant	-.1493	.379
55	To carry out the recommendation of some authority	-.3042	.076
59	To supplement a narrow previous education	-.2071	.221
84	To learn just for the sake of learning	.1230	.475
73	To learn for the joy of learning	.0890	.601
61	To acquire knowledge that will help me with other educational courses	-.2523	.137
86	To comply with instructions from someone else	-.0539	.753
77	To improve my ability to serve mankind	.0164	.924
53	To become more effective as a citizen	.0765	.648
51	To share a common interest with a co-worker or a friend	-.2590	.138
83	To comply with the suggestions of someone else	.0000	1.000
70	To prepare for service to the community	.0622	.720
67	To gain insight into myself and my personal problems	.0297	.866
82	To provide a contrast to my previous education	-.0603	.735
64	To escape the intellectual narrowness of my occupation	-.1001	.575
68	To help me earn a degree, diploma, or certificate	-.1110	.533
65	To participate in group activity	-.0110	.952
79	To improve my social relationships	-.1403	.435
75	To provide a contrast to the rest of my life	-.1678	.362
62	To fulfill a need for personal associations and friendships	-.0304	.867
76	To get a break in the routine of home and work	-.2265	.213

85	To make new friends	-.2190	.229
72	To have a few hours away from responsibilities	-.2032	.270
54	To get relief from boredom	-.0935	.601
74	To become acquainted with congenial people	-.2373	.198
57	To be accepted by others	-.1102	.549
81	To maintain or improve my social position	.2572	.162
69	To escape television	.0000	N/A

APPENDIX C

TABLES--RELATIONSHIP OF DEMOGRAPHIC VARIABLES WITH REASONS FOR NON-PARTICIPATION

Table C-1

Relationship of Gender with Reasons for Non-Participation

Item	Reason for Non-Participation	Chi-square Statistic	Significant Differences
20	The course was scheduled at an inconvenient time	1.03	No
38	I didn't think the course would meet my needs	3.89	No
43	It would interfere with my job responsibilities	1.82	No
15	The course was offered at an inconvenient location	4.48	No
18	I didn't know about courses available	4.18	No
29	The available courses did not seem useful or practical	6.57	No
37	My employer would not provide financial assistance or reimbursement	4.07	No
14	The courses available did not seem interesting	2.87	No
23	The courses available were of poor quality	3.51	No
12	I wanted to learn something specific, but the course was too general	5.06	No
19	The amount of time required to finish the course	1.88	No
35	The course was not on the right level for me	4.88	No
46	Incentives for further training are not obvious or don't exist	2.19	No
47	My supervisor didn't encourage or enable my participation	2.81	No
45	There is too much red tape in getting enrolled	6.27	No
36	I didn't think I could attend regularly	8.48	Yes
16	I couldn't afford the registration or course fees	4.73	No
11	I didn't have time for the studying required	1.26	No
32	Education would not help me in my job	5.04	No
30	I wasn't willing to give up my leisure time	1.06	No
26	I'm not that interested in taking courses	3.58	No
22	Transportation problems	3.37	No
27	Participation would take away from time with my family	0.98	No

42	It would interfere with my home responsibilities	0.79	No
39	I prefer to learn on my own	2.16	No
34	I couldn't afford miscellaneous expenses like travel, books, etc.	3.02	No
44	There is no way to get credit towards a degree	1.13	No
28	I had trouble arranging for child care	3.93	No
31	The course was offered in an unsafe area	4.23	No
21	My family did not encourage participation	0.94	No
10	I didn't think I would be able to finish the course	4.04	No
33	I felt unprepared for the course	0.65	No
8	I don't enjoy studying	1.17	No
13	I didn't meet the requirements	0.61	No
24	I was not confident of my learning ability	0.29	No
25	Family problems	0.61	No
17	I felt I was too old to take the course	0.61	No
9	Personal health problem or handicap	0.61	No
7	I felt I couldn't compete with other students	0.31	No
41	There was no place I could study or practice	0.00	No
40	My friends did not encourage my participation	0.00	No

Table C-2

Relationship of Assignment Location with Reasons for Non-Participation

Item	Reason for Non-Participation	Chi-square Statistic	Significant Differences
20	The course was scheduled at an inconvenient time	12.15	No
38	I didn't think the course would meet my needs	21.01	Yes
43	It would interfere with my job responsibilities	17.30	No
15	The course was offered at an inconvenient location	12.70	No
18	I didn't know about courses available	25.09	Yes
29	The available courses did not seem useful or practical	20.75	No
37	My employer would not provide financial assistance or reimbursement	14.23	No
14	The courses available did not seem interesting	16.84	No
23	The courses available were of poor quality	20.69	No
12	I wanted to learn something specific, but the course was too general	16.32	No
19	The amount of time required to finish the course	17.78	No
35	The course was not on the right level for me	7.15	No
46	Incentives for further training are not obvious or don't exist	13.18	No
47	My supervisor didn't encourage or enable my participation	9.89	No
45	There is too much red tape in getting enrolled	31.04	Yes
36	I didn't think I could attend regularly	16.72	No
16	I couldn't afford the registration or course fees	13.29	No
11	I didn't have time for the studying required	10.74	No
32	Education would not help me in my job	9.41	No
30	I wasn't willing to give up my leisure time	14.86	No
26	I'm not that interested in taking courses	17.07	No
22	Transportation problems	7.22	No
27	Participation would take away from time with my family	11.75	No
42	It would interfere with my home responsibilities	9.31	No
39	I prefer to learn on my own	10.17	No
34	I couldn't afford miscellaneous expenses like travel, books, etc.	14.94	No
44	There is no way to get credit towards a degree	5.32	No

28	I had trouble arranging for child care	7.44	No
31	The course was offered in an unsafe area	3.21	No
21	My family did not encourage participation	5.54	No
10	I didn't think I would be able to finish the course	11.17	No
33	I felt unprepared for the course	5.42	No
8	I don't enjoy studying	5.54	No
13	I didn't meet the requirements	4.51	No
24	I was not confident of my learning ability	1.02	No
25	Family problems	4.51	No
17	I felt I was too old to take the course	1.29	No
9	Personal health problem or handicap	1.28	No
7	I felt I couldn't compete with other students	3.42	No
41	There was no place I could study or practice	0.00	No
40	My friends did not encourage my participation	0.00	No

Table C-3

Relationship of Age with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
20	The course was scheduled at an inconvenient time	-.1854	.149
38	I didn't think the course would meet my needs	-.0190	.884
43	It would interfere with my job responsibilities	-.0152	.907
15	The course was offered at an inconvenient location	.1402	.279
18	I didn't know about courses available	-.0421	.743
29	The available courses did not seem useful or practical	-.2064	.119
37	My employer would not provide financial assistance or reimbursement	.0178	.893
14	The courses available did not seem interesting	-.0896	.486
23	The courses available were of poor quality	-.0338	.793
12	I wanted to learn something specific, but the course was too general	-.2181	.095
19	The amount of time required to finish the course	-.0489	.710
35	The course was not on the right level for me	-.1456	.277
46	Incentives for further training are not obvious or don't exist	.0433	.743
47	My supervisor didn't encourage or enable my participation	.0654	.623
45	There is too much red tape in getting enrolled	-.0415	.754
36	I didn't think I could attend regularly	.1908	.154
16	I couldn't afford the registration or course fees	.0063	.962
11	I didn't have time for the studying required	-.0949	.475
32	Education would not help me in my job	.0260	.852
30	I wasn't willing to give up my leisure time	.0619	.649
26	I'm not that interested in taking courses	-.1111	.413
22	Transportation problems	-.0260	.847
27	Participation would take away from time with my family	.0000	.000
42	It would interfere with my home responsibilities	-.1326	.332
39	I prefer to learn on my own	.0307	.822
34	I couldn't afford miscellaneous expenses like travel, books, etc.	-.0467	.735
44	There is no way to get credit towards a degree	.0000	.000

28	I had trouble arranging for child care	-.1308	.352
31	The course was offered in an unsafe area	-.1460	.302
21	My family did not encourage participation	-.0193	.889
10	I didn't think I would be able to finish the course	.1199	.388
33	I felt unprepared for the course	.2866	*.046
8	I don't enjoy studying	-.0194	.889
13	I didn't meet the requirements	.0799	.567
24	I was not confident of my learning ability	.1849	.189
25	Family problems	-.1740	.213
17	I felt I was too old to take the course	-.1515	.281
9	Personal health problem or handicap	-.1326	.346
7	I felt I couldn't compete with other students	-.0757	.596
41	There was no place I could study or practice	.0000	N/A
40	My friends did not encourage my participation	.0000	N/A

Table C-4

Relationship of Education Level with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
20	The course was scheduled at an inconvenient time	-.1500	.264
38	I didn't think the course would meet my needs	.2421	.074
43	It would interfere with my job responsibilities	.0793	.560
15	The course was offered at an inconvenient location	.0848	.529
18	I didn't know about courses available	.0463	.730
29	The available courses did not seem useful or practical	.1201	.384
37	My employer would not provide financial assistance or reimbursement	.1353	.328
14	The courses available did not seem interesting	.2710	*.044
23	The courses available were of poor quality	.1127	.403
12	I wanted to learn something specific, but the course was too general	.1850	.174
19	The amount of time required to finish the course	.1070	.434
35	The course was not on the right level for me	.2000	.150
46	Incentives for further training are not obvious or don't exist	.3039	.027
47	My supervisor didn't encourage or enable my participation	.1249	.367
45	There is too much red tape in getting enrolled	-.1098	.428
36	I didn't think I could attend regularly	.0426	.759
16	I couldn't afford the registration or course fees	-.0266	.849
11	I didn't have time for the studying required	.1465	.292
32	Education would not help me in my job	.3459	*.018
30	I wasn't willing to give up my leisure time	.3989	*.005
26	I'm not that interested in taking courses	.1630	.255
22	Transportation problems	-.0333	.814
27	Participation would take away from time with my family	.2489	.080
42	It would interfere with my home responsibilities	.3507	*.014
39	I prefer to learn on my own	.2729	.056
34	I couldn't afford miscellaneous expenses like travel, books, etc.	.0390	.787
44	There is no way to get credit towards a degree	.1836	.215

28	I had trouble arranging for child care	.1255	.392
31	The course was offered in an unsafe area	.3270	*.026
21	My family did not encourage participation	.2822	.053
10	I didn't think I would be able to finish the course	-.0353	.809
33	I felt unprepared for the course	-.0051	.973
8	I don't enjoy studying	.0787	.590
13	I didn't meet the requirements	.2289	.118
24	I was not confident of my learning ability	.1608	.276
25	Family problems	.2289	.118
17	I felt I was too old to take the course	.2304	.118
9	Personal health problem or handicap	.2304	.118
7	I felt I couldn't compete with other students	.1671	.263
41	There was no place I could study or practice	.0000	N/A
40	My friends did not encourage my participation	.0000	N/A

Table C-5

Relationship of Family Income with Reasons for Non-Participation

Item	Reason for Non-Participation	Correlation Coefficient	Level of Significance
20	The course was scheduled at an inconvenient time	-.1240	.391
38	I didn't think the course would meet my needs	-.0926	.516
43	It would interfere with my job responsibilities	.0706	.621
15	The course was offered at an inconvenient location	.0233	.873
18	I didn't know about courses available	-.0045	.975
29	The available courses did not seem useful or practical	-.0386	.793
37	My employer would not provide financial assistance or reimbursement	-.0303	.839
14	The courses available did not seem interesting	-.0137	.924
23	The courses available were of poor quality	-.1144	.433
12	I wanted to learn something specific, but the course was too general	.0527	.719
19	The amount of time required to finish the course	-.1016	.493
35	The course was not on the right level for me	-.1021	.486
46	Incentives for further training are not obvious or don't exist	-.0455	.756
47	My supervisor didn't encourage or enable my participation	.0496	.737
45	There is too much red tape in getting enrolled	-.2039	.165
36	I didn't think I could attend regularly	-.1159	.435
16	I couldn't afford the registration or course fees	-.1867	.215
11	I didn't have time for the studying required	-.0562	.707
32	Education would not help me in my job	.2346	.124
30	I wasn't willing to give up my leisure time	.2278	.131
26	I'm not that interested in taking courses	.1462	.333
22	Transportation problems	.0299	.844
27	Participation would take away from time with my family	.5058	*.001
42	It would interfere with my home responsibilities	.2806	.064
39	I prefer to learn on my own	-.0505	.739
34	I couldn't afford miscellaneous expenses like travel, books, etc.	-.1163	.449
44	There is no way to get credit towards a degree	-.1422	.367

28	I had trouble arranging for child care	.2477	.112
31	The course was offered in an unsafe area	-.1519	.334
21	My family did not encourage participation	-.0098	.950
10	I didn't think I would be able to finish the course	-.2779	.076
33	I felt unprepared for the course	-.0474	.764
8	I don't enjoy studying	.1029	.513
13	I didn't meet the requirements	-.1422	.367
24	I was not confident of my learning ability	-.0333	.834
25	Family problems	-.0474	.764
17	I felt I was too old to take the course	-.0060	.970
9	Personal health problem or handicap	-.1493	.347
7	I felt I couldn't compete with other students	-.1743	.280
41	There was no place I could study or practice	.0000	N/A
40	My friends did not encourage my participation	.0000	N/A

VITA

ALAN B. NASON

Alan B. Nason was born November 26, 1944 in Los Angeles, California. He completed his secondary education at John Burroughs High School, Burbank, California in June 1962. From July 1962 to June 1966, he attended the United States Military Academy, where he earned a Bachelor of Science Degree and a commission in the United States Army.

Alan served in the Army from 1966 until October 1988. During this period he held several command and staff positions with troop units, including two combat tours in the Republic of Vietnam, for which he was awarded the Silver Star and Purple Heart. In 1975, Alan received a Master of Science Degree in Technical Education from Akron University.

Alan held four adult education assignments while in the Army. He served as an instructor at the U.S. Army Administration Center, Fort Benjamin Harrison, Indiana. He served for 3 years at the U.S. Army Training Developments Institute, Fort Monroe, Virginia. This assignment was followed by a 4 year tour as Deputy Commandant, U.S. Military Academy Preparatory School, Fort Monmouth, New Jersey. Alan's last assignment in the Army was in the Office of the Army Director of Training, the Pentagon.

Since October 1988, Alan has been employed as a government contractor where he continues as an adult education practitioner. His primary duties include the design, development, conduct, and evaluation of seminars, workshops, and exercises for emergency managers in the Federal Executive Branch departments and agencies.

Alan is a member of the American Society for Training and Development and the West Point Society of Washington, D.C. He is married to Susan Zarr Nason of Philadelphia, Pennsylvania, and has 2 children, Michael C. Nason and Jill L. Zagurski.