

# Barriers to Youth in Acquiring Literacy Assistance

A special project of the Adult Basic Literacy Program

Tillsonburg and District Multi-Service Centre

Funded by the National Literacy Secretariat

Human Resources Development

Government of Canada

Dr. Linda L. Jessup

## Abstract

The numbers of Canadian youths (aged 16-25 years) attending Adult Basic Education is much lower than we could expect, based on the recent StatsCan (ILS) report that indicated ten percent of Canadian youth have difficulty with very basic literacy skills (Jones, 1996). Therefore, in this research we investigated the reasons for youth nonparticipation in the existing Adult Basic Education programs. An oral questionnaire format with minimal reading requirements was employed, in order to determine the relevance for Canadian youth aged 16 to 25 years (N=145) of the 32 possible reasons for nonparticipation used by Beder (1990) with a sample of American adult nonparticipants. A Principal Components Factor Analysis revealed six factors: Dislike for School, Perceived Effort Within the Class, Self Confidence, Situational Barriers, Low Perception of Need, Psychosocial Barriers, and Perceived Effort Beyond Class. These findings are consistent with previous research (Beder, 1990; Hayes & Darkenwald, 1988). ANOVA analyses with the factor scores as the dependent variables and the pre-adulthood and adulthood demographic variables as independent variables indicated significant main and interaction effects for five of the six factors. Implications of these results for practice and further research are discussed.

## Acknowledgements

Many people have provided assistance in this research project. I wish to first thank Wendy Woodhouse, who had the vision and attained the funding for the project. I also wish to thank Connie Foreman for her assistance with all aspects of the project, and Donna Smith, Ruth Major, and Carmen Sprovieri of the London Literacy Network and the London Public Library for their assistance with the data collection. I must also thank the staff and clients of community agencies too numerous to list, in both Tillsonburg and London, for their cooperation in the data collection. Without them there could not have been a research project.

## Table of Contents

### [Literacy Society and Youth](#)

### [Research Questions](#)

### [Method](#)

#### [Subjects](#)

#### [Materials](#)

[Demographic Questionnaire](#)

["Reasons for Nonparticipation" Scale](#)

[Laubach Way to Reading Screen Lists](#)

#### [Procedure](#)

#### [Analysis](#)

### [Results](#)

#### [Demographic Variables](#)

#### ["Reasons for Nonparticipation" Scale](#)

#### [Relationships between Reasons for Nonparticipation and Demographic Variables](#)

#### [Anecdotal Evidence](#)

### [Discussion](#)

#### [Reasons for Nonparticipation](#)

### [References](#)

### [Appendices](#)

## List of Tables

- Table 1 - [Age Distribution](#)
- Table 2A - [Gender Distribution Across Setting](#) Table 2B - [Number of Subjects by Setting and Gender](#)
- Table 2B - [Number of Subjects by Setting and Gender](#)
- Table 3 - [Numbers Reporting Each Living Arrangement Grouped by Gender](#)
- Table 4A - [Education Participation by Setting](#)
- Table 4B - [Numbers Reporting Past Experience with Literacy Training](#)
- Table 5 - [LWR and LWR-Revised Score Distribution](#)
- Table 6 - [Means and Standard Deviations for Reasons for Not Participating in Adult Basic Education](#)
- Table 7 - [Factor Structure for Reasons for Not Attending ABE classes](#)
- Table 8 - [Significant Comparisons Mean Factor II - Factor Scores by Setting and LWR Score](#)
- Table 9 - [Significant Comparisons Mean Factor II - Factor Scores by Setting and LWR Score-Revised Score](#)
- Table 10 - [Significant Comparisons Mean Factor II - Factor Scores by Setting and Reported Maternal Reading Level](#)
- Table 11 - [Significant Comparisons Mean Factor IV - Factor Scores by Setting and Current Participation in Skills Upgrading Classes](#)

## List of Figures

- Figure 1 [Psychosocial Interaction Model](#)
- Figure 2 [Response Sheet](#)
- Figure 3 [Mean Factor I - Factor Scores Grouped by Age](#)
- Figure 4 [Mean Factor I - Factor Scores Grouped ing Responsibilities](#)
- Figure 5 [Mean Factor I - Factor Scores Grouped by LWR-Revised Scores](#)
- Figure 6 [Mean Factor II - Factor Scores Grouped by LWR Score](#)
- Figure 7 [Mean Factor II - Factor Scores Grouped by LWR-Revised Scores](#)
- Figure 8 [Mean Factor II - Factor Scores Grouped by Participation in Skills Upgrading Classes](#)
- Figure 9 [Mean Factor II - Factor Scores by Setting and LWR Score](#)
- Figure 10 [Mean Factor II - Factor Scores by Setting and LWR-Revised Scores](#)
- Figure 11 [Mean Factor II - Factor Scores by Setting and Participation in ABL Classes](#)
- Figure 12 [Mean Factor II - Factor Scores by Setting and Maternal Reading Level](#)
- Figure 13 [Mean Factor III - Factor Scores Grouped by Parenting Responsibilities](#)
- Figure 14 [Mean Factor IV - Factor Scores Grouped by Income Category](#)
- Figure 15 [Mean Factor IV - Factor Scores Grouped by Current Participation in ABL](#)
- Figure 16 [Mean Factor IV by Setting and Current Participation in Skills Upgrading Classes](#)
- Figure 17 [Mean Factor V - Factor Scores by Setting and Work Status](#)

## Literacy Society and Youth

Western society can be described as a mass literate society in which the majority of its members are literate (Goody, 1987), yet a large portion of our population have low literacy skills. Estimates of the size of this group vary dependent upon the definition of literacy. The Southam News Survey (Calamai, 1990) reported that approximately 24% of the Canadian population were unable to use the printed and written material necessary to function in our literate society.

Another survey tested literacy levels of 2,201 Ontario residents (Jones, 1992). It indicated that only 68% of those surveyed in Southwestern Ontario, the geographic area of particular interest in this paper, could meet most everyday reading demands with ease (Level 4). This was a slightly higher proportion than that of all Canadian or all Ontario residents surveyed, yet it still indicates that Calamai (1990) may actually have underestimated the number of Canadian residents with low literacy skills. Potentially then, onequarter to onethird of the Canadian population are denied membership in our mass literate society.

Calamai (1990) painted a portrait of the "typical illiterate" as male, older, working full or part time, satisfied with his level of literacy, and poorer. By focusing on this "typical illiterate", or upon the groups that are currently of political interest, it is possible to miss groups in need within our society. One such group is our low literacy youth. In general there is a commonly held misconception that youth are literate. This misconception is exacerbated because youth with low literacy skills, particularly those who do graduate from high school, have become expert at avoiding situations that would require literacy (McLeod, 1991). Thus their low literacy levels can be overlooked. However, Murphy and Coot (1991) reported that 30% of youth aged 16 to 24 years do not have the literacy skill required for everyday activities. A recent international literacy survey (Jones, 1995, 1996) determined that approximately 10% of Canadians aged 16 to 25 years demonstrated only the lowest level of literacy in the five levels measured and approximately 25% of Canadians aged 16 to 25 years old were found to be at the second lowest level of literacy measured in the survey.

These statistics are consistent with the general level of literacy in the Canadian population (Jones, 1992), indicating that the proportion of youth who are literate is not a great deal higher than that of the general population, contrary to popular belief. Canadian school leavers aged 16 to 20 were at particular risk for low literacy skills (Jones, 1996). Depending upon the literacy skill tested, between 41% and 48% of this group were placed at level 2, and for this group level 2 was the only one at which the sample size was sufficient for reporting. In contrast, between 15% and 24% of graduates were at level 2 (Jones, 1996). The benefit of formal education is clear in the scores of the continuing students and the graduates. At the same time, the finding that between 15% and 24% of school graduates were only at level 2 is also disturbingly high. Thus, despite the popular misconception that youths are literate, some have difficulty with literacy skills. Nearly one half of school leavers demonstrated only level 2 literacy (of the 5 levels), and nearly

one fifth of the school graduates also demonstrated only level 2 literacy (of the 5 levels).

While the positive impact of formal education is clear in these statistics, it is less clear that youth are taking advantage of the education programs available to them. Most adult continuing education literature concurs with the picture of the American adult education nonparticipant as older. On the other hand, an examination of the descriptive age statistics for adult education participants provided by Charner and Fraser (1986) and by Scanlan (1986) revealed a curvilinear relation between age and participation in continuing education. They report that the most likely age group to participate were 25 to 44 or 25 to 34 years respectively. The 17 to 24 year old group were below US national average for proportion of the group participating in adult continuing education, as were the older groups. Interpretation of statistics at this age is difficult however, since many youths are still in the school system. The most informative statistic would be the proportion of those eligible for continuing education who are presently participating in an adult education program.

All the reports indicate that an unacceptably large proportion of our youth have limited literacy skills, and in addition, there is some evidence this age group are not as likely to participate in adult continuing education. This is unfortunate, given the results of the International Adult Survey that indicted the positive relation of formal education and literacy level in youth (Jones, 1996).

Low literacy youth are a segment of our population that is neglected in research and research-based programming, even though they may suffer the stigma of low literacy more than any other group in our society, because of their recent full-time education experience. There is very little valid, replicable research concerning the literacy education needs of this age group, or of barriers to participation for youth. Indeed, a decade ago Darkenwald (1986) found very little true research concerning any aspect of literacy education. After extensive and repeated searches of the relevant data bases, he was able to find and evaluate only 60 studies concerning literacy in general. Only two of these were concerned with barriers to participation, and neither of these was concerned specifically with youth.

A more recent selective review of the literature (Wikelund et. al., 1992) had the professed purpose of reviewing research concerning participation in literacy education. Nonetheless, the majority of studies and theoretical papers reviewed in truth were concerned with participation in adult education generally. This is particularly the case when the literature concerning deterrents to participation was reviewed. Only one report published since Darkenwald's (1986) critique was discussed and it is not clear from their discussion whether the report was concerned with true research.

Our recent extensive search of the psychology, social sciences, and education abstracts revealed that little has changed since these two reviews were published. Only three reports were found that focused on youth participation in adult basic education. Although each was flawed methodologically, they did speak to the conduct of research with low literacy youth.

McLeod (1991) reported on a survey conducted in Australia that was at best pilot work. It was not based within any theoretical framework, the sampling was not random, the data collection was not controlled, and the authors did not provide an adequate description with which to replicate the study.

On the main, McLeod (1991) discussed the difficulties created by the isolation of low literacy youth. First he stated that they tend to avoid potentially embarrassing social situations, thus they do not seek out basic education. Second, he stated that because of their isolation from mainstream society they receive information regarding programs from other members of their non-literate sub-culture, or social network. Due to the isolation of this group, and their oral transmission of information, individual youths may be either unaware of, or misinformed concerning, adult basic education programs. This speaks to the method with which one can contact a sample of low literacy youths not participating in training. Aside from contacting youth through agencies with which they may be involved, much of the successful sample contacts are likely to be by way of word of mouth within the non-literate social network. This would also include, as McLeod (1991) recommended, setting up a work station, or at the very least advertising, at the local malls.

Ladanchuk (1996) conducted research and made numerous recommendations concerning literacy programming for youth. Again, this was pilot research at best. The characteristics and method of recruitment of the 10 subjects were not reported. Also, it was often unclear whether Ladanchuk (1996) was reporting on the questionnaire sample, or on a combination of that sample and the individuals who provided input during open discussion groups for the development of the questionnaire. If the two groups were combined in the reporting of the results this is a serious deficiency of the study. Surprisingly, while Ladanchuk (1996) recognized the need for further research, she continued with a proposed final model for provision of youth literacy programs based on the research results. Ladanchuk (1996) noted some inconsistencies in this- model; these undoubtedly are the result of the sample size involved in the research. With such a small group, individual variances would most certainly outweigh the group commonality.

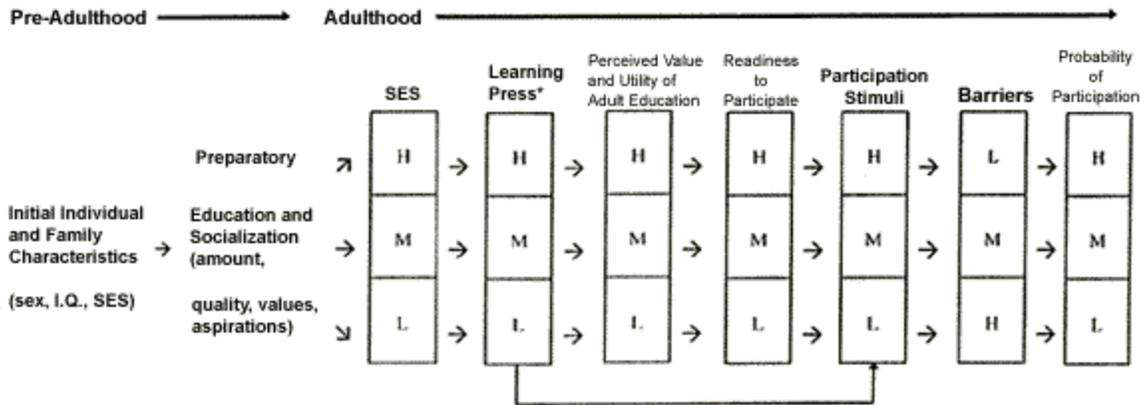
Murphy and Cool (1991) reported on a survey of 401 Canadian youth who had returned to a learning program. The authors provided a copy of their questionnaire, and sufficient information for study replication. However, while this survey used a sample of reasonable size, it was not random. Also, the researchers failed to control for the nature of the program in which the learners were engaged (skills upgrading or literacy training) and they failed to control for the environment of the individual (rural or urban setting). The results were presented for the entire sample without testing for significant differences between even those obviously different groups. Further to this, despite the sample size, the researchers simply presented descriptive statistics of the sample, without testing for significant differences concerning their responses. Although the methodology could have supported more sophisticated statistical analyses, these unfortunately were not reported.

The respondents were asked to indicate the characteristics of those who do not return, and the barriers to participation they themselves experienced. Seventy-seven percent reported experiencing no barriers, 12% reported travel costs as a barrier, and 4% reported child care as a barrier. In contrast, the barriers they attributed to others included a negative attitude (58%), no determination or ambition (52%), given up on education (49%), no support from family and friends (40%), problems with drugs (40%), unaware of programs (36%). Ten percent also felt lack of space in the programs could deter some from participating. It is unclear whether the respondents were describing themselves more truthfully when asked to discuss others (thus avoiding the social response bias), or responding concerning others from the stereotypic perspective of "illiterates" held by our society. To prevent this uncertainty, it would be preferable to request responses concerning personal deterrents to participation, and reduce the effect of social response bias statistically. In addition, the lack of theoretical framework prevented Murphy and Cool (1991) from grouping these reported barriers in any meaningful way for discussion.

Darkenwald and Merriam (1982) proposed a general model of participation in adult education (see [Figure 1](#)) in which they hypothesized that the decision to participate in adult education depends upon the combined influence of numerous variables, in addition to demographic characteristics. This model, taken as a totality, provides a theoretical framework for the study of youth nonparticipation in adult basic education.

The model postulates that variables entered earlier (shown on the left of [Figure 1](#)) are considered to influence those entered later in the model (shown to the right). Thus the individual's demographic characteristics and socioeconomic status (SES) during childhood, as well as his or her education history, will influence SES as an adult. Then, they all influence the "learning press"; this is postulated by be a major variable during adulthood.

**Figure 1**



\*Function of level of social participation, occupational complexity, and lifestyle.

Psychosocial Interaction Model of Participation in Organized Adult Education

(Darkenwald and Merriam, 1982)

Note that a later variable, "participation stimuli" is directly connected to "learning press" (see [Figure 1](#)). This indicates that the triggers that may stimulate participation (such as job change, a new baby, a divorce, or the desire for self-improvement) derive both directly and indirectly from the "learning press". Indirectly, "learning press" influences "participation stimuli" by way of the individual's subjective valuation of adult education, and their "readiness to participate". Thus, how the individual views and responds to "participation stimuli" is highly subjective. A particular trigger will stimulate participation for some individuals, while for others the same trigger will not be strong enough to do so.

Moreover, the last variable, "barriers to participation", also influences the decision to participate (see [Figure 1](#)). In theory, according to Darkenwald and Merriam (1982), these "barriers to participation" could be categorized as situational, institutional, informational, and psychosocial. Situational "barriers to participation" involve the social and physical life circumstances of the individual. Institutional "barriers to participation" are those deriving from the system of the educational institution. These include lack of programming and policies that create confusion for learners. Informational "barriers to participation" involve failures in communication by the institution, in not imparting knowledge, and by the potential learner, in failing to obtain and use available information. Psychosocial "barriers to participation", which are sometimes more restrictively defined as attitudinal or dispositional, are the individual's beliefs and attitudes that interfere with participation. The term psychosocial was used to stress the influence membership in social groups has upon personal perceptions. By placing "barriers to participation" last in the series of variables, Darkenwald and Merriam (1982) indicated that while "barriers" influence participation, they are also influenced by all the preceding variables. Thus, again the perception of "barriers to participation" is of import. For some individuals, difficulty obtaining child care may prove to be an insurmountable barrier to participation, while for others the same degree of difficulty would be overcome. This would depend upon the strength of the "learning press", the "participation stimuli" and the "perceived value" and "readiness" variables (Darkenwald & Merriam, 1982).

This model, on the whole, provides an excellent framework upon which to consider participation in adult education. Given this model, it is obvious that the empirical confirmation of "barriers to participation" is important to informing practice. We cannot alter many of the variables, but the educator can make provisions to remove the obstacles, or at least to reduce their impact, so they do not over-ride the influence of the other variables. If the "participation stimuli" are sufficiently strong such that it is moderately probable the individual will participate, but they are then met by high levels of "barriers to participation", participation becomes unlikely. If, on the other hand, the educator had reduced the "barriers to participation" to a low level, for example by providing child care, participation is much more likely. Thus, a logical point for intervention to improve participation is at the "barriers to participation".

Research was also discovered that was concerned with barriers to adult basic education for all age groups (e.g. Beder, 1990; Couillard, 1990; Fick, 1994; Gammage, 1992; Hayes and Darkenwald, 1988; Literacy and poverty, 1992; Quigley, 1995; Sawyer & Rodriguez, 1992/1993). Some of these studies either developed their survey instrument (e.g. Fick, 1994; Sawyer & Rodriguez, 1992/1993), or discussed their survey results (e.g. Couillard, 1990; Gammage, 1992; Quigley, 1995) using a theoretical framework based upon only part of the Darkenwald and Merriam (1982) model of participation in adult education. This does allow for a more parsimonious discussion of the results. Unfortunately, factor analytic research has shown that the model oversimplified the construct of deterrents to adult education participation (Scanlan, 1986). Thus, the four category model of deterrents, while theoretically, and intuitively logical, has not been supported empirically, and its use in isolation from the remainder of the Darkenwald and Merriam (1982) model as their sole theoretical framework is questionable.

Apart from these weaknesses in the conceptualization of these studies, other weaknesses are evident in most. Both Fick (1994) and Sawyer and Rodriguez (1992/1993) developed their own survey instrument but failed to report on tests of the validity and reliability of their instruments. They each used a small sample size, as did Quigley (1995), who interviewed 20 individuals. Fick (1994) used a sample of convenience with 25 respondents, while Sawyer and Rodriguez (1992/1993) did make attempts to ensure the sample of 56 was representative. Although some of the reports did cite descriptive statistics to support their conclusions, such as simple means and percentage of respondents reporting a particular barrier to participation, none report tests of significance for group differences.

While Hayes and Darkenwald (1988; Hayes, 1988) looked at "barriers to participation" for low literacy individuals within the theoretical framework of the Darkenwald and Merriam (1982) model, this work was conducted retrospectively, with students currently enrolled in ABE programs. Thus, it is unclear whether the sample overcame the same "barriers to participation" that a group not attending have found insurmountable. It is necessary to replicate this work with a sample of non-participants. Beder (1990) set out to do so, but the potential sample was constructed using telephone listings and automobile registration data. This eliminated the most financially disadvantaged members of the population, those without telephones or cars. In addition his selection criterion was not a specific level of literacy. Rather, he confounded education and literacy levels by including anyone in the study who had not completed high school. Many individuals who do not complete high school are extremely literate, while as Calamai (1990) reported, some individuals who claimed higher education levels proved to be functionally "illiterate" in their testing.

This confound may have resulted because Beder (1990) collected his data in a state using a school-based adult basic education system directed toward high school completion. Such a diploma focused program by definition differs from a program designed to provide basic literacy training. Thus, the research results may reflect attitudes and "barriers to participation" unique to that environment. Given those weaknesses in the research and because Beder (1990) developed his own instrument, it cannot be considered to be a replication of Hayes and Darkenwald (1988). Despite this, Beder (1990) did report similar findings to those reported by Hayes and Darkenwald (1988). This indicates that the factors describing "barriers to participation" empirically are fairly robust. The true replication called for by Hayes (1988), with a sample that includes non-participants in literacy training, and the replication called for later by Beder (1990), remain to be conducted.

The purpose of this research project was to investigate barriers to attaining literacy training with a sample of low literacy youth (aged 16 to 25 years) in order to suggest a literacy campaign for youth suitable for empirical testing of its efficacy in controlled studies. The research design incorporated a replication and extension of Hayes (1988), and of Beder (1990). Given that Hayes (1988) developed her research instrument using interviews with ABE students and instructors while Beder (1990) developed his research instrument using interviews with high school leavers who had never participated in ABE, Beder's (1990) research instrument was most appropriate to our research question. The research instrument was administered using the methodology established by Hayes (1988). However, rather than individuals of any age with low literacy skills, the sample was two groups of low literacy youth. One group had never attended any literacy or skills upgrading programs. The other group had attended such programs.

Both Hayes and Darkenwald (1988) and Beder (1990) used a 3-point Likert response scale. Such a truncated response scale was likely to result in very low variance in the responses, and may account for their findings that on the main the reasons for nonparticipation had low mean response ratings. Threepoint Likert response scales were employed to overcome the comprehension demands on the low literacy respondents. As an alternative to the truncated 3-point Likert scale, in this research a 5-point Likert scale constructed with pictographs to reduce response demands was employed.

## Research Questions

1. What factors deter participation for low literacy youth residing in Southwestern Ontario?
2. Do these factors support the findings reported by Beder (1990)?
3. What is the relation of age (categorized as younger or older) and the factors?
4. What is the relation of parenting responsibilities and the factors?
5. What is the relation of the factors and living situation?
6. What are the relations of income or employment status and the factors?
7. What is the impact of the setting (rural as opposed to urban) on the factors?
8. Do the factors reported retrospectively by current participants in adult education differ from the factors reported by non-participants?
9. Do students of basic literacy training report different factors than students of skills upgrading programs?
10. What is the impact of familial and/or spousal literacy level?
11. Do factors vary in relation with the participants' literacy levels prior to training as determined with the Laubach Way to Reading Screening Lists and with the nonparticipants' literacy levels as determined with the Laubach Way to Reading Screening Lists?

## Method

### Subjects

Data were collected in two Southwestern Ontario centers. The first, from which we drew the rural sample, was a town with a population of approximately 13,000, serving a large surrounding agricultural area. The second center, from which we drew the urban sample, was a city of approximately 500,000 people. The rural sample was made up of 73 individuals. The urban sample was made up of 72 individuals. Thus, the total sample consisted of 145 individuals. Comparisons across the rural and urban samples will be referred to as comparisons of setting.

Participants in the research were no longer enrolled in the regular education system and had been judged to have low literacy skills by themselves or by the referring agencies. They were either individuals for whom English was their first language or those for whom English was their second language. It was required that subjects comprehend English sufficiently that they could understand the questionnaire items read to them.

Each sample included individuals who had never participated in any form of adult education, and individuals who had participated in some form of adult education. In the total sample, 50 (34.48%) had never participated in any form of adult education, and 95 (65.52%) had had some experience with adult education. Of those in the latter group, 76 (52.41% of the total sample) were currently participating in adult education, and 19 (13.10% of the total sample) had "dropped out".

The recruiters attempted to ensure that the groups were representative for gender and for age within the range studied, but this was a sample of convenience and groups were not forced to equality. Subjects who were currently, or had previously been, participants in literacy programs or other adult education were required to have been between 16 and 25 years old on entry to the program. Subjects who had no history of participation in any adult education were required to be between 16 and 25 years old at the time of the data collection. Age at entry to adult education program, or age at data collection (for those who had never participated in adult education) ranged between 16 and 25 years, with a mean age of 19.448 years (s.d. 2.754). The total sample consisted of more males than females, with 85 males (58.62%) and 60 females (41.38%) participating.

Subjects were volunteers, who were recruited through official community agencies such as Youth Employment agencies, and other youth groups, as well as groups offering adult education. Advertisements were placed on the cable television community information networks. Posters were placed in shopping malls and other appropriate locations; data were collected in the local mall in addition to participating agencies. Some youths discovered the research through oral communications with friends who had participated, or who were able to read the advertisements because they had higher literacy skills. Because "illiteracy" has not been defined adequately by our society, we included any individual believed to be experiencing literacy difficulties either by him or herself, or by an agency representative. Literacy level of the subjects was assessed during the data collection.

Of necessity, the sample was a nonrandom one in that any one volunteering for the research participated. This does compromise the degree to which the findings can be generalized. On the other hand, this is not a serious problem because the stability of the factor structures can only be truly established through replication. One purpose of this research was to replicate Beder (1990) to determine the degree to which the factor structure he found remains stable across populations. Also, this quasi-experimental nature of the research was not a concern because the research is preliminary to the development of a literacy program for youth, which should be subjected to stringent empirical testing prior to implementation.

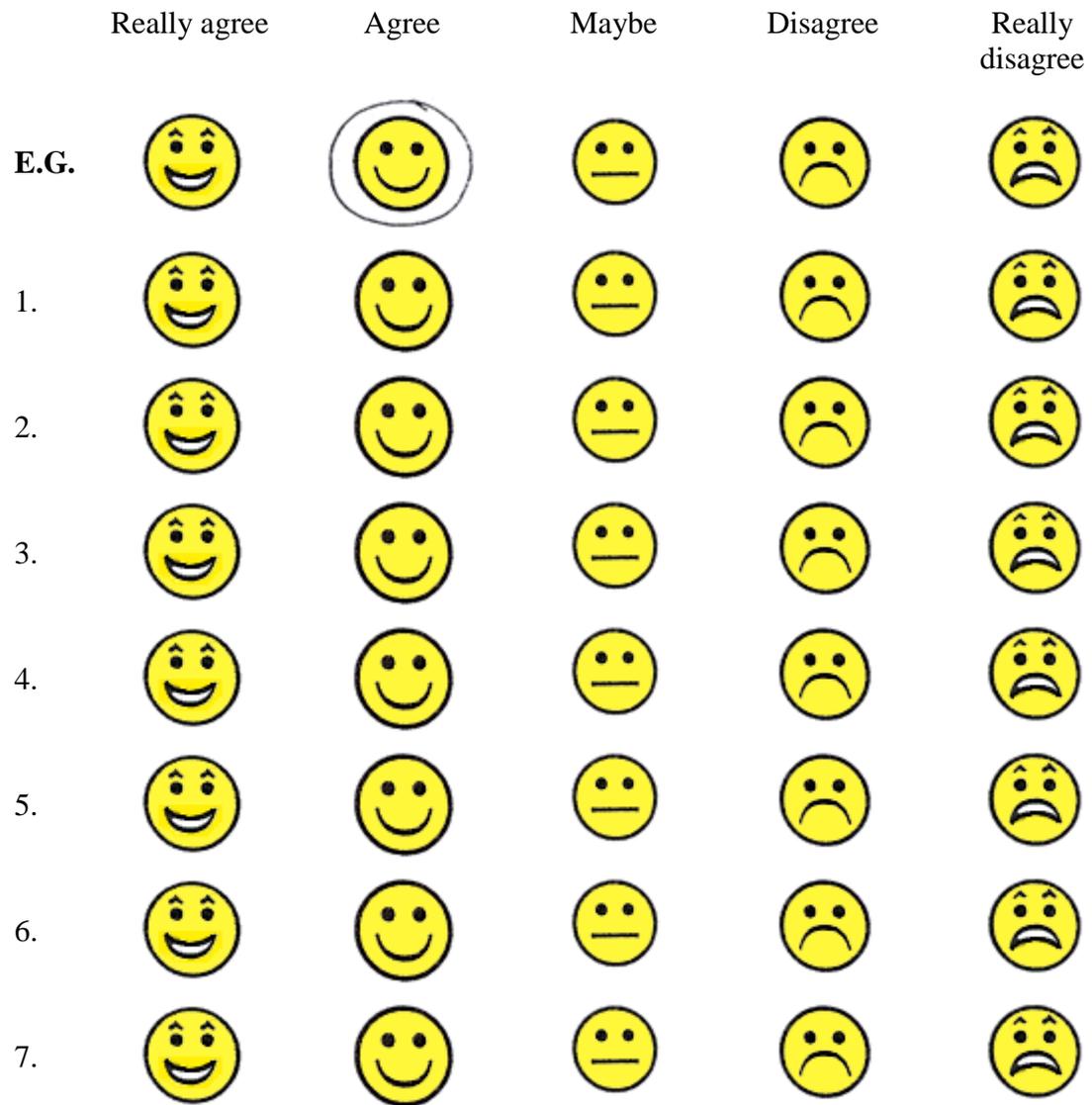
## Materials

Demographic Questionnaire. Subjects completed a demographic questionnaire (see Appendix A). Information included gender, age, parenting responsibilities, income, employment status, and parental literacy level. Information collected from this questionnaire was entered into the data base categorically.

"Reasons for Nonparticipation" Scale. Subjects completed the Beder (1990) "Reasons for Nonparticipation" research instrument (see Appendix B). The 32 inventory items were developed from the results of interviews with high school leavers who had not attended any adult education programs. Thus the scale demonstrates content validity. It includes such statements as, "School is too hard" and "I already know enough". Internal consistency of the items was high with a Chronbach's Alpha of .85 (Beder, 1990). The order of items was determined by random selection and did not vary across subjects.

Using Hayes' (1988) methodology, items on the inventory were read aloud by the experimenter. To avoid requiring literacy skill for questionnaire response, without truncating the response measure to three points, a pictorial response sheet was developed (see Figure 2) using 5 facial pictographs ranging from extreme pleasure (agree strongly) through a neutral face to extreme displeasure (disagree strongly). These pictographs were based on research concerning the perception of facial expressions of emotion (Russell & Bullock, Russell & Ridgeway, cited in Lay, Waters, & Park, 1989). The respondents demonstrated no difficulty recognizing the meaning of the pictographs. Responses to each item were scored from one (disagree strongly) to five (agree strongly). Each individual's score for each item, was entered into the data base.

Figure 2



Laubach Way to Reading Screening Lists (LWR). The LWR Screening Lists are four short lists of words (see [Appendix C](#)) that are used in programs using the Laubach Way to Reading curriculum. They are used to give a rough indication of the entry level to the program appropriate for that student, and hence provide useful information regarding the individual's present reading skills (Sawyer, Dougherty, and Lipa, 1987). They were used in this research to operationally define literacy and to roughly divide the respondents according to level of literacy skill. The lists range from the first list of 10 simple words such as "a" and "this" to the fourth list of 20 relatively complex words such as "league", "annoy", and "ache". The individual is asked to read the lists until he or she has difficulty reading four words in a row. The experimenter recorded the words read incorrectly on the individual's record sheet (see [Appendix C](#)). The level to which the individual was assigned was determined according to the total correct for each list. List one mastery required nine of the 10 words correct, lists two and three required 13 of the 15 words correct, and list four required 18 of the 20 words correct. The mastery level of each individual was entered into the data base as categorical data.

### Procedure

Full participation in the research required a group session followed by an individual session for literacy level assessment. Questionnaire administration took place in groups or individually, in a setting with which the subjects were comfortable. The explanation of the research and ongoing instructions were made using a preestablished routine to ensure experimenter consistency across setting (see Appendices [D](#) and [E](#)). The experimenter first administered the Demographic Questionnaire (see [Appendix A](#)). The items were read to the subjects and the experimenter pointed to an enlarged questionnaire, so the subjects could see which words on the questionnaire corresponded with their responses. Subjects having difficulty with the items received assistance from the experimenters. Following the administration of the Demographic Questionnaire, the subjects were introduced to the "Reasons for Nonparticipation" Scale and the pictograph response sheets (see [Figure 2](#) and [Appendix B](#)). Once again, the items were read aloud to the subjects by the experimenter and anyone requiring assistance received it. The completion of the "Reasons for Nonparticipation" Scale ended the group session. Subjects were then asked to see the experimenter individually for the LWR Screening Lists. No group portion of the data collection lasted longer than 30 minutes. Length of collection times varied, dependent upon the amount of assistance required by the group members.

## Analyses

Significance tests appropriate to the data type (continuous or categorical) were conducted using as the dependent variables the demographic variables (such as setting, gender, age and so on) as well as the literacy scores. To decrease the probability of committing a Type I error, given these large numbers of comparisons, alpha was protected experiment-wise, using families of hypotheses. Therefore, alpha was given as 0.05 divided by the number of tests needed to address each hypothesis.

The nonparticipation questionnaire items were ranked according to mean response on the 5-point Likert scale. To make the responses to the nonparticipation questionnaire more comprehensible, and in order to replicate Beder (1990), they were then transformed using a Principal Components Factor Analysis and the solution was rotated using the Varimax procedure.

Prior to factor extraction the items and their correlation matrix were examined to determine that the data were suitable for factor analysis. The Bartlett test of sphericity,  $\chi^2(496) = 1654.867$ ,  $p < 0.001$ , indicated it was unlikely the population correlation matrix was an identity (Norusis, 1985).

Therefore it was acceptable to continue with factor analyses. An examination of the correlation matrix in conjunction with the communalities (multiple  $R^2$  indicated three of the items were questionable. A convergence of low communality and no significant inter-correlations was required for exclusion of a variable from the factor analysis, because both were conservative tests. Although, as indicated by their mean response the items may in their own stead have been important reasons for nonparticipation, they were insufficiently correlated with the other factors to include them in the factor analysis (Norusis, 1985). Therefore the items "*There aren't many people in adult classes who are my age.*", "*...I felt that my family wouldn't like it if I went back to school.*", and "*I have too many time conflicts at work to go back to school.*" were not included in the factor extraction. Thus factor analysis was conducted on responses to 29 items made by 145 subjects. This constitutes sufficient subject numbers for each item, that is, the sample was of adequate size for a factor analysis of 29 items. Because the sample size was less than 200, the inclusion value for factor loading (the value at which an item was said to load significantly onto a particular factor) was set conservatively at  $|0.40|$ .

An initial factor analysis indicated eight factors with eigenvalues greater than one. Based upon the factor scree test, and factor solutions ranging between two and eight factors, a six factor solution was finally chosen. The six factor solution was selected because it was the only solution between four and eight factors that used all 29 variables with no multiple loadings (one item loading on more than one factor). Also, this solution explained an acceptable amount of the total variance (54.3%), unlike the four and five factor solutions.

The factor structure remained stable in the solutions from four to six factors, with the inclusion of new variables in the additional factors. One factor split along conceptually logical lines when the solution was expanded from four to five factors, and another when the solution was expanded from five to six factors. This addition of items and splitting of factors, in contrast to a complete reorganization of the factor structures when different solutions were requested indicated that the factor structure was quite robust.

Individual factor scores were computed during the Principal Components Factor Analysis. These scores are standardized, allowing for their use as dependent variables in further analyses. They were employed as the dependent variables in Analyses of Variance (ANOVA) with setting and age (older as opposed to younger) always entered as independent variables, and with one of gender, parenting status, living situation, income, employment status, education participation, familial and/or spousal literacy level, and individual literacy levels, as the independent variables. These analyses allowed for the determination of the significant main effects of each of these variables, as well as their significant interactions. To decrease the probability of committing a Type I error, given the large numbers of comparisons (one test for each of the six factors for each of the variables), alpha was once again protected experiment-wise, using families of hypotheses. Therefore, alpha was given as 0.008. Interaction effects were explored further using the Tukey HSD statistic.

Finally, the anecdotal comments made by the subjects were examined for content and relevance to the Reasons for Nonparticipation Factors.

## Results

### Demographic Variables

The age distributions of the rural and urban samples did not differ significantly; nor did the age distributions of males and females differ significantly. As indicated in Table 1, the entire sample consisted of significantly<sup>1</sup> more younger subjects (16-20 years) than older subjects (21-25 years).

Table 1

#### Age Distribution

<b>Age</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>Total Younger</b>	<b>Percent Younger</b>
	27	14	25	14	13	93	64.14%
<b>Age</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>Total Older</b>	<b>Percent Older</b>
	19	9	8	7	9	52	35.86%

For the entire sample significantly<sup>2</sup> more males than females participated in the research (see Table 2A below).

Table 2A

#### Gender Distribution Across Setting as Percent of Total Sample

		<b>Setting</b>		
		<b>Urban</b>	<b>Rural</b>	<b>Total</b>
<b>Gender</b>	<b>Male</b>	35.17%	23.45%	58.62%
	<b>Female</b>	14.48%	26.90%	41.38%
	<b>Total</b>	49.66%	50.34%	N=145

<sup>1</sup> Kolmogorov-Smirnov one sample test using Chi-Square distribution with 1 degree of freedom. Maximum Difference = 0.683,  $p < 0.001$

<sup>2</sup> Kolmogorov-Smirnov one sample test using Chi-Square distribution with 1 degree of freedom. Maximum Difference = 0.683,  $p < 0.001$

This effect is likely due to the different distributions across the rural and urban samples. The gender distributions differed significantly between the rural and urban samples,  $\chi^2(1) = 8.794, p=0.003$ . The rural sample consisted of fewer males and more females than the expected, (shown in Table 2B below) while the urban sample consisted of more males and fewer females than the expected.

Table 2B

Numbers of Subjects by Setting and Gender (with expected values)

		Setting		
		Urban	Rural	Total
Gender	Male	51 (42.5)	34 (42.5)	85
	Female	21 (30)	39 (30)	60
	Total	73	73	145

A significant effect was found for living arrangement according to setting,  $\chi^2(6) = 20.291, p=0.002$ , in which more rural subjects than the expected reported living in a spousal relationship, while fewer urban subjects than the expected reported living in such a relationship. The urban sample reported more than the expected numbers living in alternate arrangements, especially jail, or alone. Males and females also differed significantly on living arrangement  $\chi^2(6) = 17.837, p=0.007$ . An examination of Table 3 indicates that more females in the sample than the expected lived with a spouse, while fewer males than expected did so.

Table 3

Numbers Reporting Each Living Arrangement Grouped by Gender (with expected values)

		Spouse	Parents	Other Rel.	Friends	Group Home	Alone	Jail	Total
Gender	Male	13 (21)	43 (38)	3 (3)	6 (8)	1 (2)	10 (9)	9 (5)	85
	Female	23 (15)	21 (26)	2 (2)	7 (5)	2 (1)	5 (6)	0 (4)	60
	Total	36	64	5	13	3	15	9	145

Living arrangement varied significantly according to age,  $\chi^2 (6) = 26.616, p < 0.001$ . This once again appears to be due primarily to the category "living with a spouse", in which more than the expected frequency were older and less than the expected frequency were younger. Living arrangement also varied significantly according to number of children,  $\chi^2 (24) = 54.848, p < 0.001$ . Most subjects with children reported living in a spousal relationship while more than the expected frequency of childless subjects reported living with parents.

The total sample differed significantly on several other variables. Reported monthly income differed significantly according to number of children, for the total sample,  $\chi^2 (28) = 144.744, p < 0.001$ . More than the expected subjects reported income over five hundred dollars monthly when they also reported one child or more. In addition, work status significantly affected reported monthly income,  $\chi^2 (14) = 60.945, p < 0.001$ . As one would expect, more than the expected reporting part-time or full-time employment also reported higher monthly incomes. The numbers reporting employment were low however, with 64.8% of the sample reporting they were unemployed. Reported monthly income differed significantly by setting,  $\chi^2 (7) = 24.719, p = 0.001$ , with more than the expected individuals in the urban sample reporting very low income, and fewer than the expected individuals in the rural sample reporting similarly low income.

Table 4A

Education Participation by Setting

		Setting		
		Urban	Rural	Total
<b>Participant</b>	<b>Past ABL only</b>	5	14	
	<b>Current ABE only</b>	31	27	95 (65.52%)
	<b>Past ABL &amp; Current ABE</b>	6	12	
<b>Nonparticipant</b>		30	20	50 (34.48%)
<b>Total</b>		72	73	145

As [Table 4A](#) indicates, for the entire sample more subjects (95, or 65.52%) had participated at some time in some form of adult education, be it Adult Basic Literacy (ABL) or Adult Basic Education (ABE), in comparison to those (50, or 34.48%) who had never participated in any adult education. The urban sample consisted of 42 subjects who were, or had been, participants in adult education and 30 who had never been participants in adult education, the rural sample consisted of 53 subjects who were, or had been, participants in adult education and 20 who had never been participants in adult education (see [Table 4A](#)).

Those currently attending school full-time or part-time and nonparticipants did not differ from the expected by setting. As shown in Table 4B, the rural sample reported significantly more past ABL experience than the expected, while the urban population reported less than the expected,  $\chi^2(1) = 7.889, p=0.005$ .

Table 4B

Numbers Reporting Past Experience with Literacy Training (with expected values)

		Setting		
		Urban	Rural	Total
<b>Past Literacy Training</b>	<b>Yes</b>	11 (18.5)	26 (18.5)	37
	<b>No</b>	61 (54)	47 (54)	108
<b>Total</b>		72	73	145

Significant differences were found between various other variables and the adult basic education history of the subjects. Past literacy training significantly affected  $\chi^2$  employment status,  $\chi^2 (2) = 17.848$ ,  $p < 0.001$ , with those reporting past literacy training also reporting higher than the expected frequency fulltime employment. Past literacy training also significantly affected reported monthly income,  $\chi^2 (7) = 28.020$ ,  $p < 0.001$ . More than expected who reported no previous literacy training also reported monthly incomes less than five hundred dollars, while more than the expected who did report previous literacy training gave their monthly income as greater than five hundred dollars monthly. A significant effect of past literacy training on number of children,  $\chi^2 (4) = 22.696$ ,  $p < 0.001$ , in which more people than the expected with two children report previous literacy training was also found. A significant positive affect of increasing age on past literacy training,  $\chi^2 (1) = 7.148$ ,  $p = 0.008$ , was also found.

As expected, first language differed significantly across settings,  $\chi^2 (3) = 53.034$ ,  $p < 0.001$ . This reflects a considerable group within the rural sample whose first language was German.

To conclude, the total sample differed across ages in past experience with literacy training and in living arrangements. Employment status, number of children, and reported monthly income differed significantly from the expected according to past literacy training. Also, the number of children reported was greater than expected when the subjects reported living in a spousal relation. Setting resulted in differences from the expected in past literacy training, gender distribution, reported monthly income and living arrangements. When subjects were categorized according to gender, numbers reporting the different living arrangement categories differed from the expected. Higher reported monthly incomes were reported with greater than the expected frequency when the individuals also reported either parental responsibilities or full-time or part-time employment. First language differed across setting. Laubach Way to Reading Screening Lists (LWR).

The LWR scores, used as a rough indicator of literacy level, ranged between one and four, with a mean of 3.207 (s.d. 1.117). Thus, the distribution of the literacy scores was skewed, with a greater portion of the scores at the higher end of the scale (see Table 5 below).

During the course of the data collection, it was evident that a difference existed between subjects who read list four, but with difficulty, and with one or two errors, and those subjects who read list four correctly with no hesitation or difficulties. Therefore, for the purposes of the research, we assigned the latter individuals to a fifth category, level 5. This revised mastery level (from one to five) was also entered into the data base as a separate categorical variable.

Table 5

LWR and LWR-Revised Score Distribution

	Score					Total
	1	2	3	4	5	
<b>LWR</b>	21	15	22	87	--	145
<b>LWR-Revised</b>	21	15	22	21	66	145

The LWR-Revised scores were also used as a rough indicator of literacy level. They ranged between one and five, with a mean of 3.662 (s.d. 1.492). Thus, the distribution of the LWR-Revised scores was also skewed, with a greater portion of the scores at the higher end of the scale (see Table 5 above).

Both the LWR scores and the LWR-Revised scores did not differ significantly between settings, by gender, by age, or by any other demographic variables assessed in this research.

"Reasons for Nonparticipation" Scale

Responses on all 32 items ranged between 1 (really disagree) and 5 (really agree). [Table 6](#) shows the reasons for not participating ranked by mean scores.

When the means for the items are considered, the results of this research appear to have supported the theoretical structure regarding nonparticipation proposed by Darkenwald and Merriam (1982) in that the 12 items with a mean of 2.5 or greater shown in [Table 6](#) represent at least three of the four theoretical barriers to participation they discussed. Of the 12 items, five are clearly psychosocial barriers, three are clearly situational barriers, and two are clearly informational barriers. For example, the first three items (with the greatest mean responses on a 5-point Likert scale) are psychosocial barriers. In general, the psychosocial items reflect a negative attitude toward school or self. The item "*I don't*

*know anything about adult classes.*" is an informational barrier. The item *"I have to take care of my family."* is a situational barrier. The item *"It would take me too long to finish high school."* is possibly an institutional barrier, an informational barrier, or a psychosocial one. It is interesting that disapproval by family was considered on the mean as the least important barrier. As one would expect with the age group sampled, the item, *"I am too old to go back to school."* was third lowest, on the mean. Recall however that some of the subjects did strongly agree with these items, as all items ranged from 1 to 5 on the 5-point Likert scale.

Table 6

Means and Standard Deviations for Reasons for Not Participating in Adult Basic Education

Item	Mean	SD
Going back to school would be like going to high school all over again.	3.1	1.4
I would feel strange going back to school.	2.9	1.2
I just don't like school.	2.8	1.4
There aren't many people in adult classes who are my age.	2.8	1.3
There is too much on my mind to go back to school.	2.8	1.3
I don't know anything about adult classes.	2.8	1.4
It would take me too long to finish high school.	2.7	1.4
I didn't like school so I don't want to go back.	2.6	1.4
I am not motivated enough to go back to school.	2.6	1.3
I don't have enough free time to go back to school.	2.6	1.3
It would cost me too much money to go back to school.	2.5	1.3
I have to take care of my family.	2.5	1.5
I don't have enough energy to go back to school.	2.4	1.2
I am usually too tired to go back to school.	2.4	1.2
School is too hard.	2.4	1.2
I couldn't pay for child care or transportation.	2.3	1.4
I am too set in my ways to go back to school.	2.3	1.2
I am too lazy to go back to school.	2.3	1.3
I have too many time conflicts at work to go back to school.	2.2	1.3
I didn't think that school would be very good.	2.2	1.2
I haven't know where there are any classes.	2.2	1.2

I move around too much to go back to school.	2.0	1.2
I don't think that I am smart enough to go back to school.	2.0	1.2
I don't think I could use the things I would learn in school.	2.0	1.0
My friends would laugh at me if I went back to school.	1.9	1.1
A high school diploma wouldn't improve my life.	1.9	1.3
Going back to school wouldn't make me any smarter.	1.9	1.2
I already know enough.	1.9	1.1
I don't go back to school because nobody knows that I don't already have an education.	1.8	1.1
I am too old to go back to school.	1.7	1.0
I don't need a diploma.	1.6	1.0
I felt that my family wouldn't like it if I went back to school.	1.5	0.9

While the mean score and rank of each item does provide important descriptive information, taken as a whole, Table 6 provides a picture too intricate to discuss in any meaningful way. Therefore, the responses on the items were subjected to factor analysis to explore the underlying relationships among the 32 items. The result of the final factor analysis is shown in [Table 7](#). The final six factor solution accounted for 54.3% of the total variance in the nonparticipation scale data. Recall that the items, "*There aren't many people in adult classes who are my age*"....."*I felt that my family wouldn't like it if I went back to school.*", and "*I have too many time conflicts at work to go back to school.*" were excluded from factor analyses due to their low correlations with the remaining variables.

Table 7

Factor Structure for Reasons for Not Attending ABE Classes

Load	Mean	Variable
<i>Factor I</i>		
		<i>Dislike for School</i> (mean item score = 2.48)
0.81	2.8	I just don't like school.
0.75	2.6	I didn't like school so I don't want to go back.
0.61	2.2	I didn't think that school would be very good.
-0.60	2.5	I have to take care of my family.
0.57	2.3	I am too lazy to go back to school.
<i>Factor II</i>		
		<i>Perceived Effort Within Class-Self Confidence</i> (mean item score = 2.32)
0.69	2.0	I don't think I am smart enough to go back to school.
0.67	2.4	School is too hard.
0.61	2.8	I don't know anything about adult classes.
0.61	2.2	I haven't known where there are any classes.
0.51	1.8	I don't go back to school because nobody knows that I don't already have an education.
0.44	2.7	It would take me too long to finish high school.
<i>Factor III</i>		
		<i>Situational Barriers</i> (mean item score = 2.47)
0.68	2.4	I am usually too tired to go back to school.
0.68	2.8	There is too much on my mind to go back to school.
0.64	2.6	I am not motivated enough to go back to school.
0.61	2.6	I don't have enough free time to go back to school.
0.51	2.0	I move around too much to go back to school.
0.51	2.4	I don't have enough energy to go back to school.
<i>Factor IV</i>		
		<i>Low Perception of Need</i> (mean item score = 1.86)
0.79	1.9	A high school diploma wouldn't improve my life.
0.67	1.9	Going back to school wouldn't make me any smarter.
0.66	1.6	I don't need a diploma.

0.64	2.0	I don't think I could use the things I would learn in school.
0.54	1.9	I already know enough.
<i>Factor V</i>		<i>Psychosocial Barriers</i> (mean item score = 2.50)
0.74	2.9	I would feel strange going back to school.
0.57	1.7	I am too old to go back to school.
0.56	3.1	Going back to school would be like going to high school all over again.
0.52	2.3	I am too set in my ways to go back to school.
<i>Factor VI</i>		<i>Perceived Effort Beyond Class</i> (mean item score = 2.23)
0.66	2.5	It would cost me too much money to go back to school.
0.59	1.9	My friends would laugh at me if I went back to school.
0.57	2.3	I couldn't pay for child care or transportation.

---

The first factor, called *Dislike for School* after the work of both Hayes (1988) and Beder (1990) is made up of items indicating a general negative perception of school. These include "I just don't like school." and "I didn't like school so I don't want to go back."; items that loaded highest and second highest on the factor. The item "I have to take care of my family." also loads on this factor. Factor I accounted for 11.32% of the total variance in the nonparticipation scale data.

The second factor, called *Perceived Effort Within Class-Self Confidence*, in part after Beder (1990), contains items that denote a sense that the individual cannot succeed at school. These include the two highest loading items, "I don't think I'm smart enough to go back to school.", and "School is too hard.". The informational items, "I don't know anything about adult classes." and "I haven't known where there are any classes." also loaded on this factor. Factor II accounted for 8.55% of the total variance in the nonparticipation scale data.

The third factor, entitled *Situational Barriers* after the work of Darkenwald and Merriam (1982) encompassed items related to the individual's current lifestyle. These included items related to energy level, stressors, free time, and residential mobility. Factor III accounted for 10.15% of the total variance in the nonparticipation scale data.

Factor IV, accounting for 10.60% of the total variance in the nonparticipation scale data, included five items that reflected a Low *Perception of Need* for additional schooling.

Factor V is constituted of four items that reflect a perception of self in the social milieu. For example, it includes "I would feel strange going back to school." and "I am too old to go back to school." Hence, after Darkenwald and Merriam (1982), it is entitled *Psychosocial Barriers*. Factor V accounts for 7.36% of the total variance in the nonparticipation scale data.

Three items comprise the sixth factor, *Perceived Effort Beyond Class*. The items "It would cost me too much money to go back to school." and "I couldn't pay for child care or transportation." reflect the reality of the cost of education to the individual, and the effort such cost requires of the potential student. The item "My friends would laugh at me if I went back to school." reflects the social cost the potential student may fear. Factor VI accounts for 6.39% of the total variance in the nonparticipation scale data.

The mean item scores indicate the magnitude of importance the factor holds for the population sampled. They suggest that the factors fall into three fairly distinct groupings. Factor V - *Psychosocial Barriers* (2.50), Factor I - *Dislike for School* (2.48), and Factor III *Situational Barriers* (2.47) form a grouping of equal magnitude and primary importance. Factors II and VI, involving *Perceived Effort, Within Class* (2.32) and *Beyond Class* (2.23) form a grouping of approximately equal magnitude and moderate importance. Factor IV *Low Perception of Need* (1.86) is the least important to the subjects sampled.

## Relationships between Reasons for Nonparticipation and Demographic Variables

Fifteen significant effects were found when the individual factor scores were examined using ANOVA analyses. Factor I differed significantly when comparisons were made across age categories,  $F(1,137) = 17.678, p < 0.001$ , across parenting responsibilities,  $F(1,134) = 10.263, p = 0.002$ , and across LWR-Revised scores,  $F(1,125) = 4.403, p = 0.002$ . Factor II differed significantly when comparisons were made across LWR scores,  $F(3,129) = 10.877, p < 0.001$ , across LWR-Revised scores,  $F(4,125) = 7.543, p < 0.001$ , and across participation in skills upgrading classes,  $F(1,129) = 12.621, p = 0.001$ .

Four significant interaction effects were found for Factor II. All involved setting, with LWR,  $F(3,129) = 4.952, p = 0.003$ , LWR-Revised,  $F(4,125) = 4.802, p = 0.001$ , current participation in ABL classes,  $F(1,129) = 8.600, p = 0.004$ , and reported maternal reading level,  $F(4,125) = 5.909, p < 0.001$ . Factor III differed significantly between the group who reported having children and the group who reported no parenting responsibilities,  $F(1,134) = 8.381, p = 0.004$ . Factor IV differed significantly across reported monthly income categories,  $F(3,117) = 5.115, p = 0.002$ , and according to current participation in ABL classes,  $F(1,129) = 13.814, p < 0.001$ . An interaction effect, of setting by current participation in skills upgrading classes,  $F(1,129) = 9.308, p = 0.003$ , was also found for Factor IV. The interaction of setting by work status significantly affected Factor V factor scores,  $F(2,133) = 6.007, p = 0.003$ . No significant main effects or interaction effects were found for Factor VI factor scores.

ANOVA analyses with Reported Spousal Reading Level as an independent variable proved impossible to conduct, because numbers in many cells for each category as assessed, and also numbers in many cells of any meaningful grouping of those categories, were insufficient.

As [Figure 3](#) reveals, the Factor I (*Dislike for School*) factor scores of those in the younger age category (16 to 20 years of age) were on the mean positive, while mean factor score of those in the older age category (21 to 25 years of age) was negative. Similarly, as [Figure 4](#) indicates, Factor I mean factor scores were positive for those who had no parenting responsibilities, and were negative for those who did have parenting responsibilities. Mean Factor I factor scores also differed according to the subjects' reading levels, as shown in [Figure 5](#). Factor scores of those reading at the lowest level (LWR-Revised 1) were on the mean negative, while mean factor scores of those reading at the highest level (LWR-Revised 5) were positive. The mean scores form a sine-wave pattern. Thus, factor scores on Factor I (*Dislike for School*) were influenced by the respondent's age, parenting responsibilities and reading level, with younger, childless, and better readers having more positive scores on the factor.

Figure 3

### Mean Factor I - Factor Scores Grouped by Age

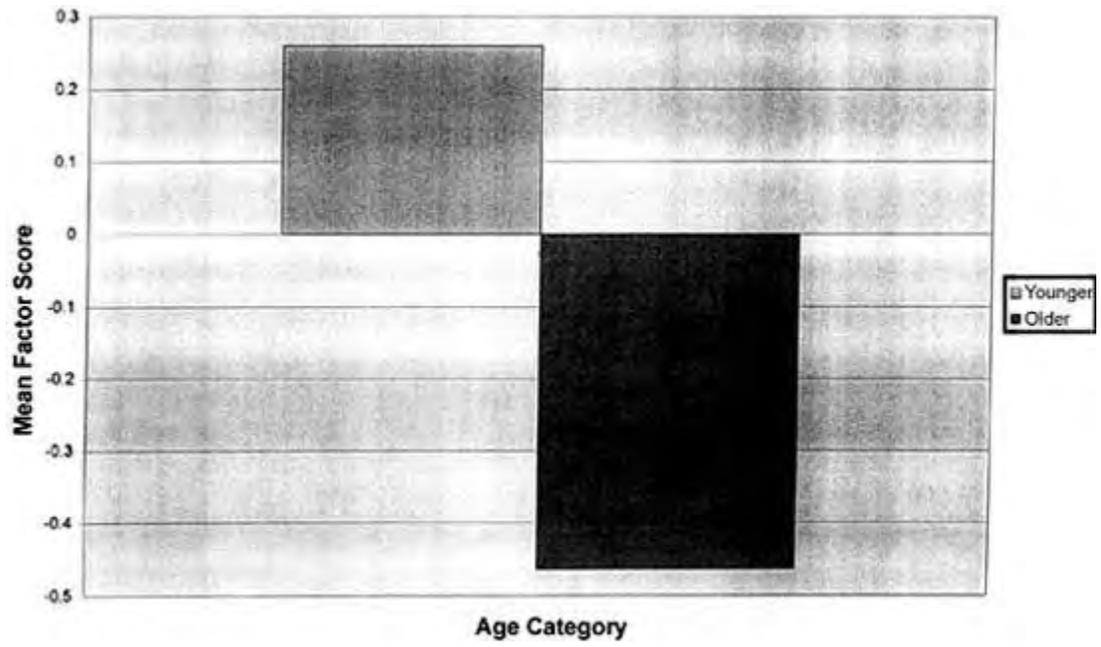


Figure 4

Mean Factor I - Factor Scores Grouped by Parenting Responsibilities

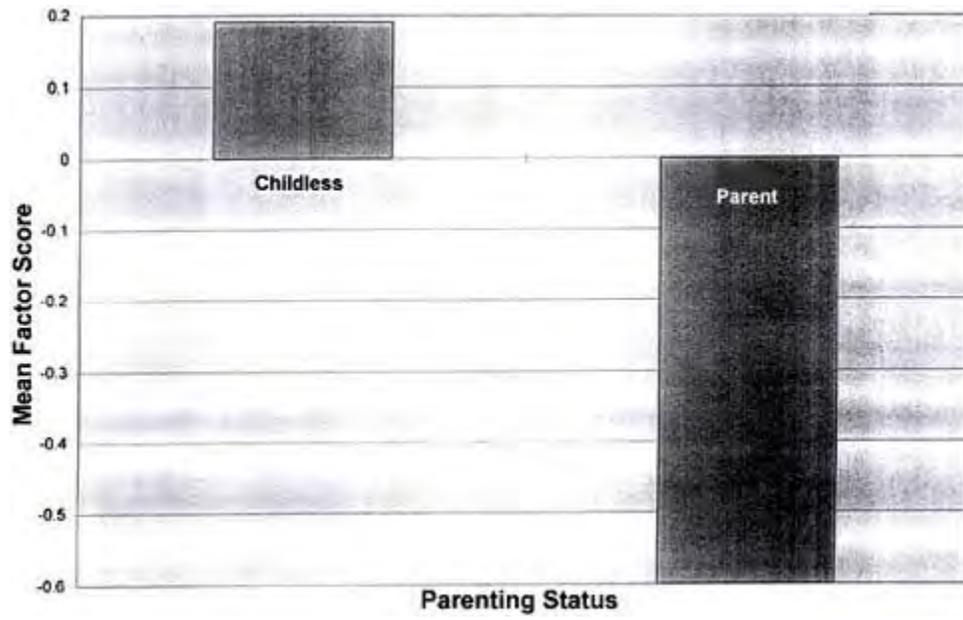


Figure 5

Mean Factor I - Factor Scores Grouped by LWR-Revised Scores

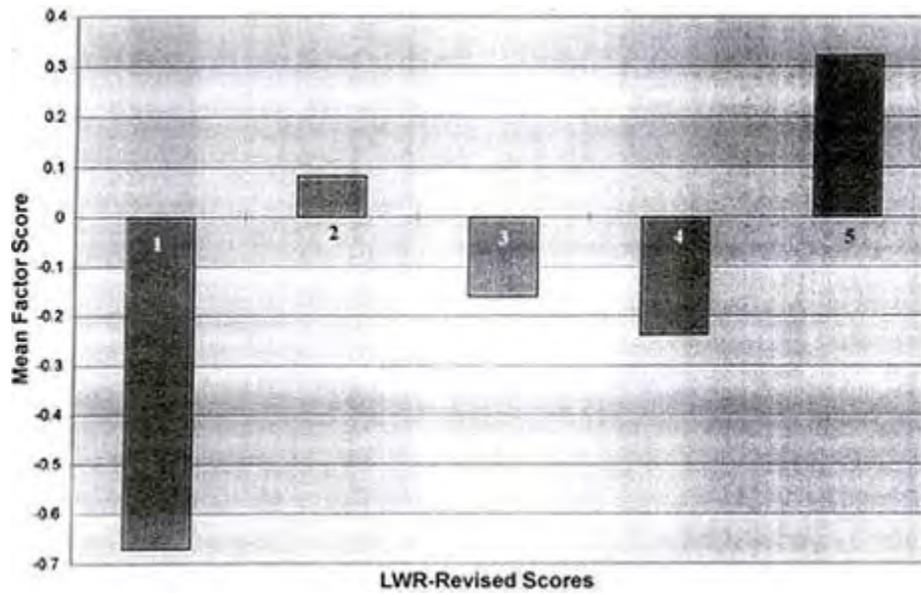


Figure 6

Mean Factor II - Factor Scores Grouped by LWR Score

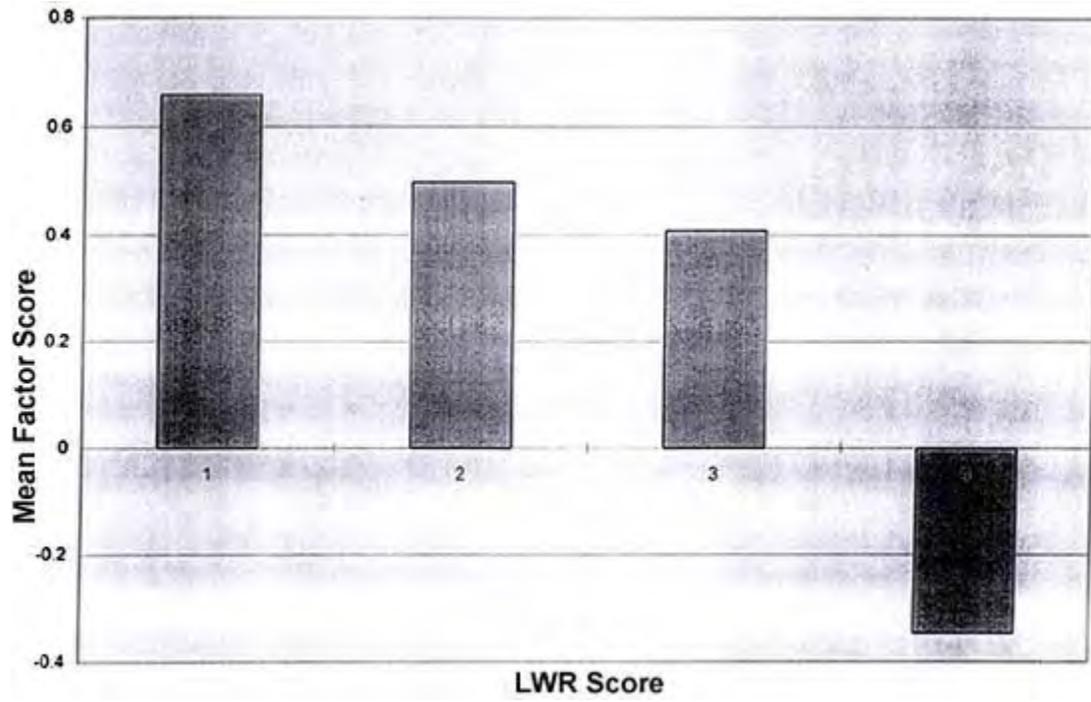
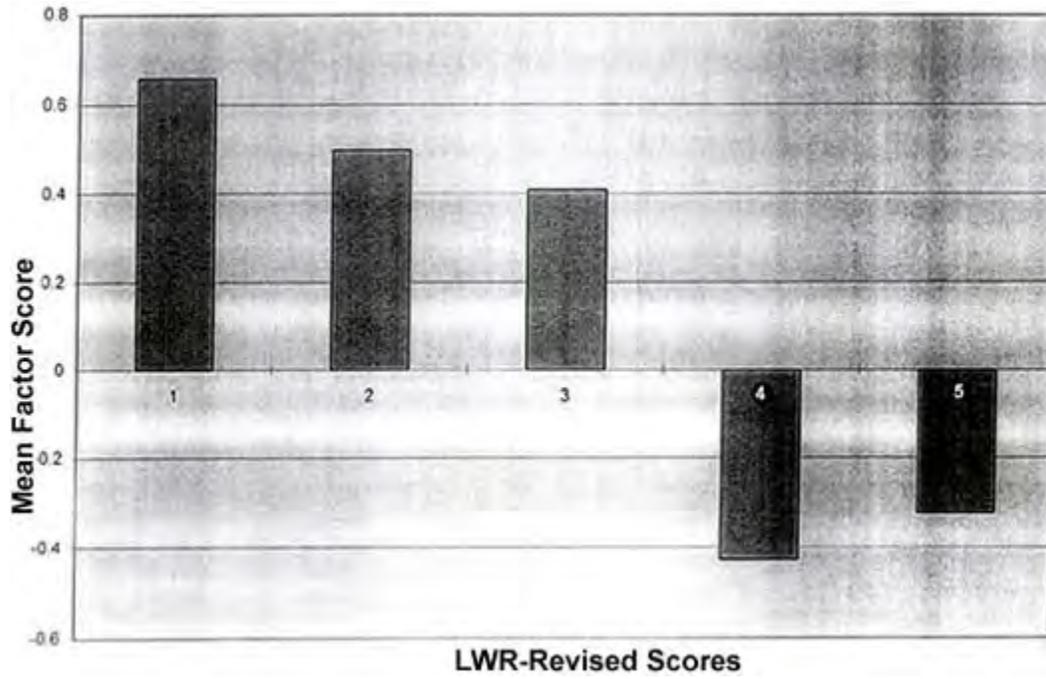


Figure 7

Mean Factor II - Factor Scores Grouped by LWR-Revised Scores



Factor II (*Perceived Effort Within the Class-Self Confidence*) was affected by the demographic variables differently than was Factor I. For example, as [Figures 6 and 7](#) indicate, those at the lowest reading level (LWR and LWR-Revised 1) tended to have positive factor scores on Factor II, and those with the highest reading levels (LWR 4 and LWR-Revised 4 and 5) tended to have negative factor scores on Factor II. This is opposite to the finding for Factor I mean factor scores. However, any conclusions regarding these main effects are constrained by the significant interaction effects on Factor II of setting with the LWR and LWR-Revised scores. The main effect of current participation in skills upgrading classes on Factor II mean factor scores is due to a positive mean score for nonparticipants, while mean score of those currently participating was negative (see [Figure 8](#)).

Table 8

Significant Comparisons Mean Factor II - Factor Score by Setting and LWR Score

<i>Pairwise Comparison</i>	<i>Mean Difference</i>	<i>Probability</i>
Rural LWR1 vs Rural LWR4	-0.960	0.040
Rural LWR1 vs Urban LWR4	-1.068	0.009
Rural LWR2 vs Rural LWR4	-1.212	0.003
Rural LWR2 vs Urban LWR4	-1.320	<0.001
Rural LWR4 vs Urban LWR1	1.224	0.015
Rural LWR4 vs Urban LWR3	1.373	0.002
Urban LWR1 vs Urban LWR4	-1.333	0.004

Figure 8

**Mean Factor II - Factor Scores Grouped by Participation in Skills Upgrading Classes**

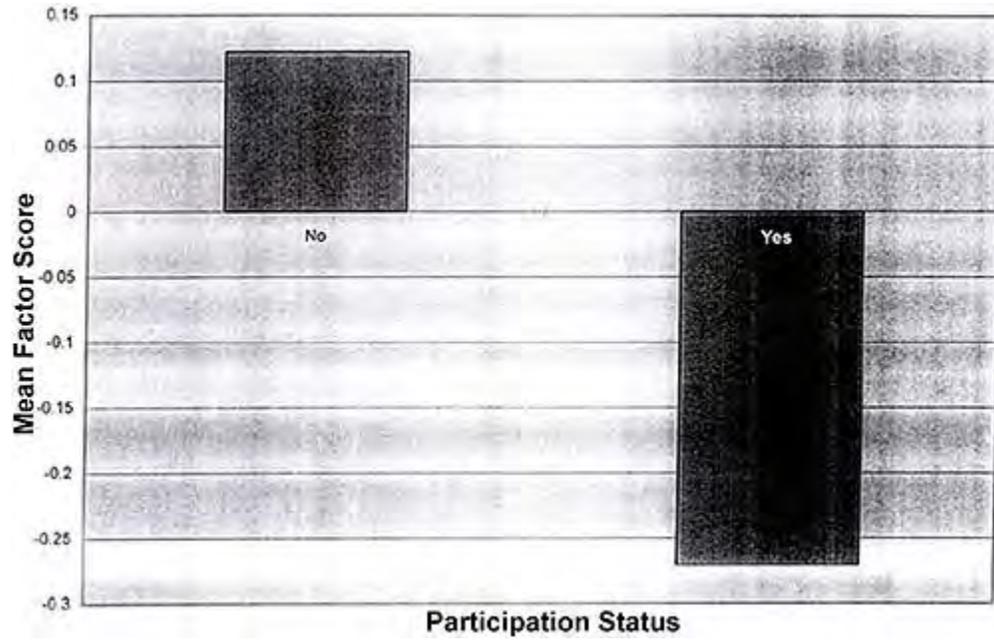


Figure 9

Mean Factor II - Factor Scores Grouped by Setting and LWR Score

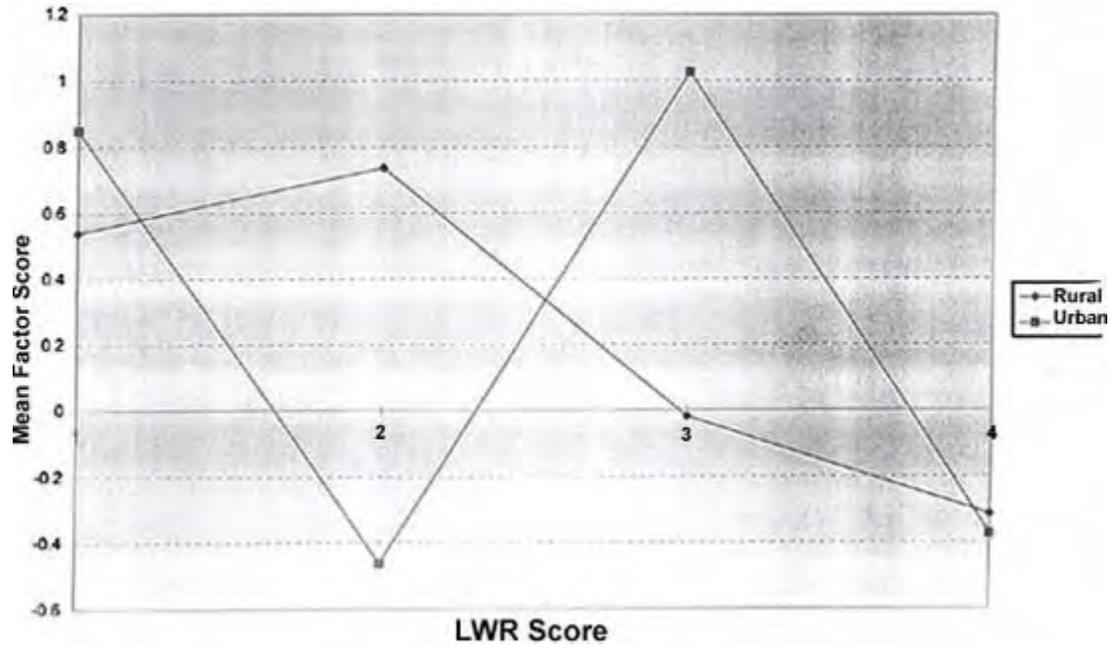


Figure 10

Mean Factor II - Factor Scores Grouped by Setting and LWR-Revised Scores

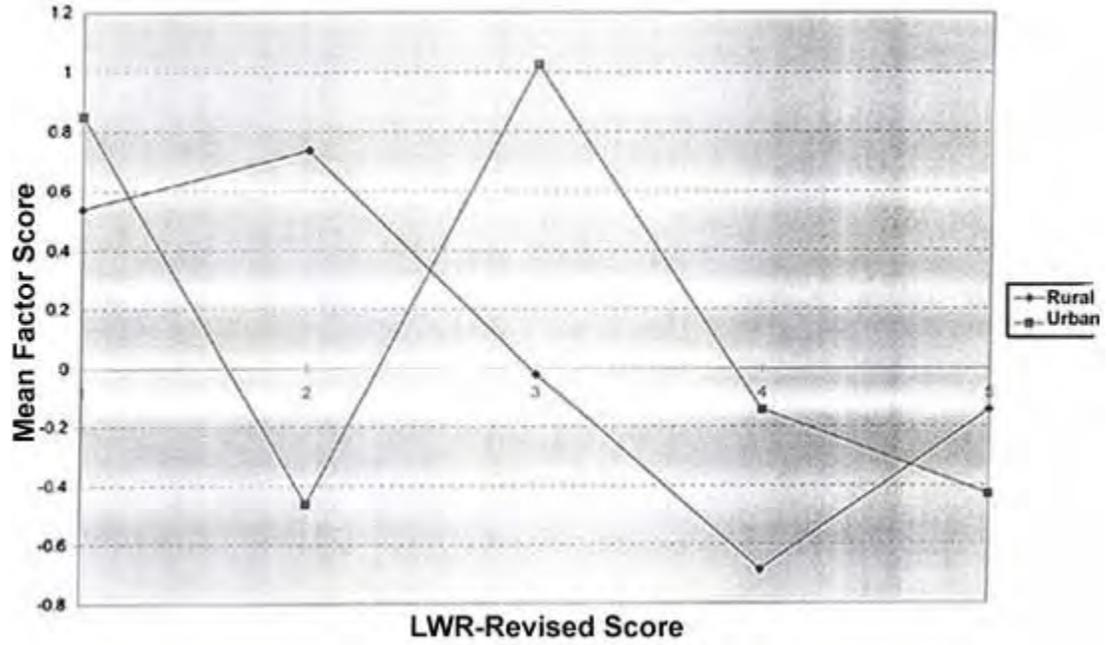


Figure 11

**Mean Factor II - Factor Scores Grouped by Setting and Participation in ABL Classes**

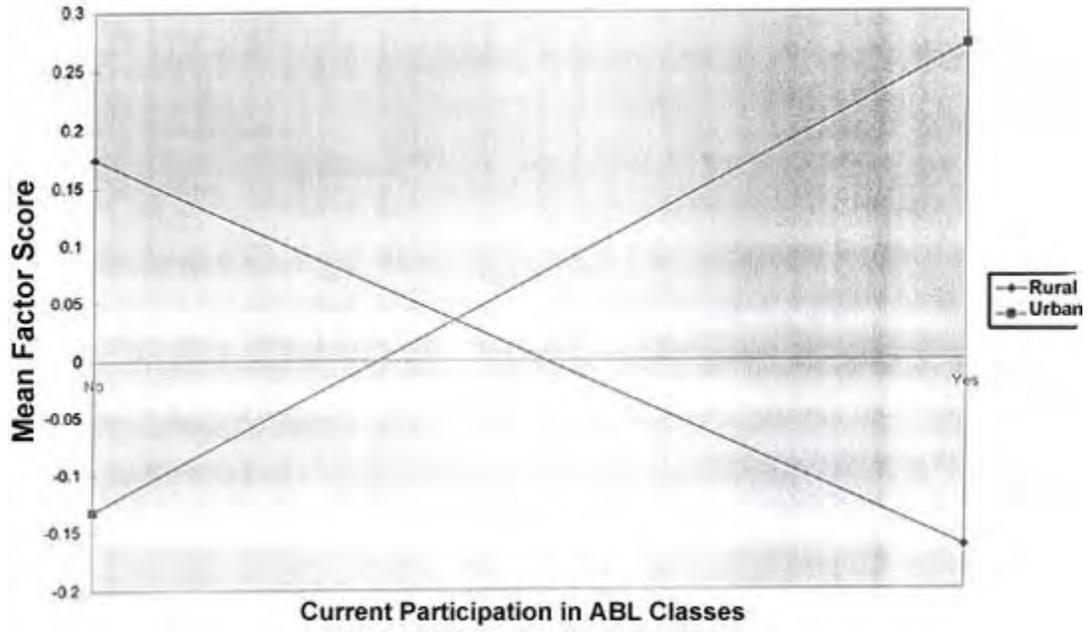


Figure 9 indicates the nature of the interaction effect of setting and LWR score on mean Factor II factor scores; Table 8 shows the significant Tukey HSD pairwise comparisons of mean factor scores grouped by setting and LWR score.

Similarly, Figure 10 shows the nature of the interaction effect of setting and LWR-Revised score on mean Factor II factor scores; Table 9 shows the significant pairwise comparisons of mean factor scores grouped by setting and LWR-Revised score. In each case the interactions are due to a complex pattern of between group and within group comparisons.

The interaction effect of setting and current participation in ABL classes on Factor II mean factor scores is illustrated in Figure II. Tukey HSD pairwise comparisons were not significant. Thus the significant overall ANOVA interaction effect appears to be due to the opposite slopes of the groups. The last Factor II interaction effect, setting by reported maternal reading level, is shown in Figure 12. Three Tukey HSD pairwise comparisons were significant (see Table 10).

Table 9

Significant Comparisons Mean Factor 11 - Factor Scores by Setting and LWR-Revised Score

<i>Pairwise Comparison</i>	<i>Mean Difference</i>	<i>Probability</i>
Rural LWR-Revised 1 vs Rural LWR-Revised 4	-1.323	0.031
Rural LWR-Revised 1 vs Urban LWR-Revised 5	-1.152	0.007
Rural LWR-Revised 2 vs Rural LWR-Revised 4	-1.576	0.004
Rural LWR-Revised 2 vs Rural LWR-Revised 5	-1.053	0.043
Rural LWR-Revised 2 vs Urban LWR-Revised 5	-1.405	<0.001
Rural LWR-Revised 4 vs Urban LWR-Revised 1	1.588	0.011
Rural LWR-Revised 4 vs Urban LWR-Revised 3	1.737	0.002
Rural LWR-Revised 5 vs Urban LWR-Revised 3	1.213	0.029
Urban LWR-Revised 1 vs Urban LWR-Revised 5	-1.417	0.003
Urban LWR-Revised 3 vs Urban LWR-Revised 5	-1.565	<0.001

Figure 12

Mean Factor II - Factor Scores Grouped by Setting and Reported Maternal Reading Level

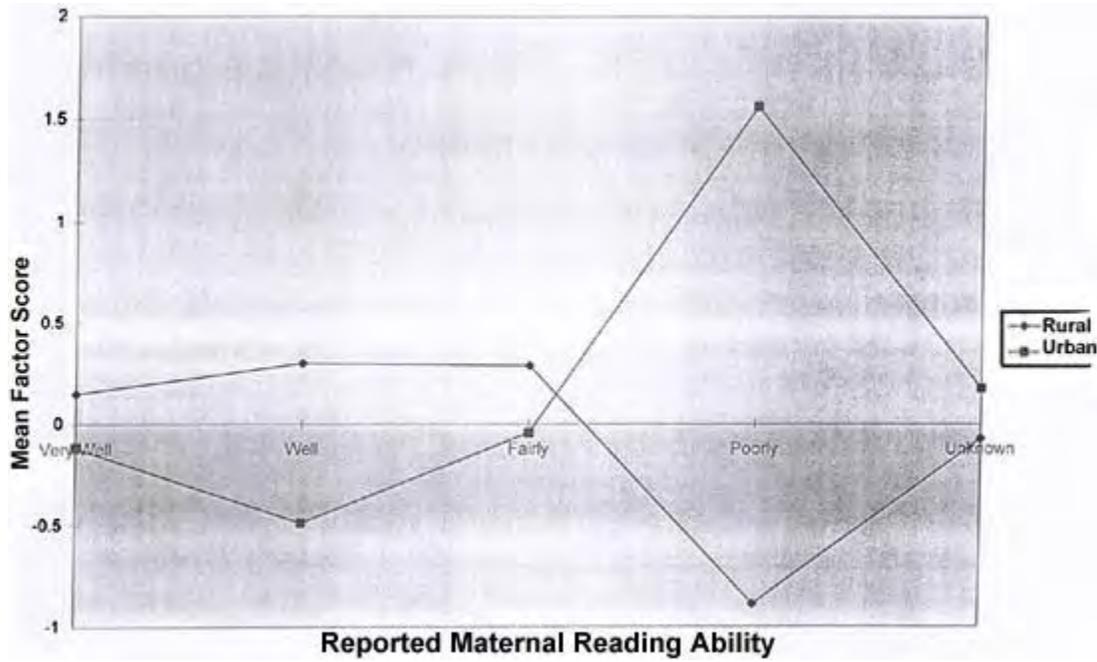


Figure 13

Mean Factor III - Factor Scores Grouped by Parenting Responsibilities

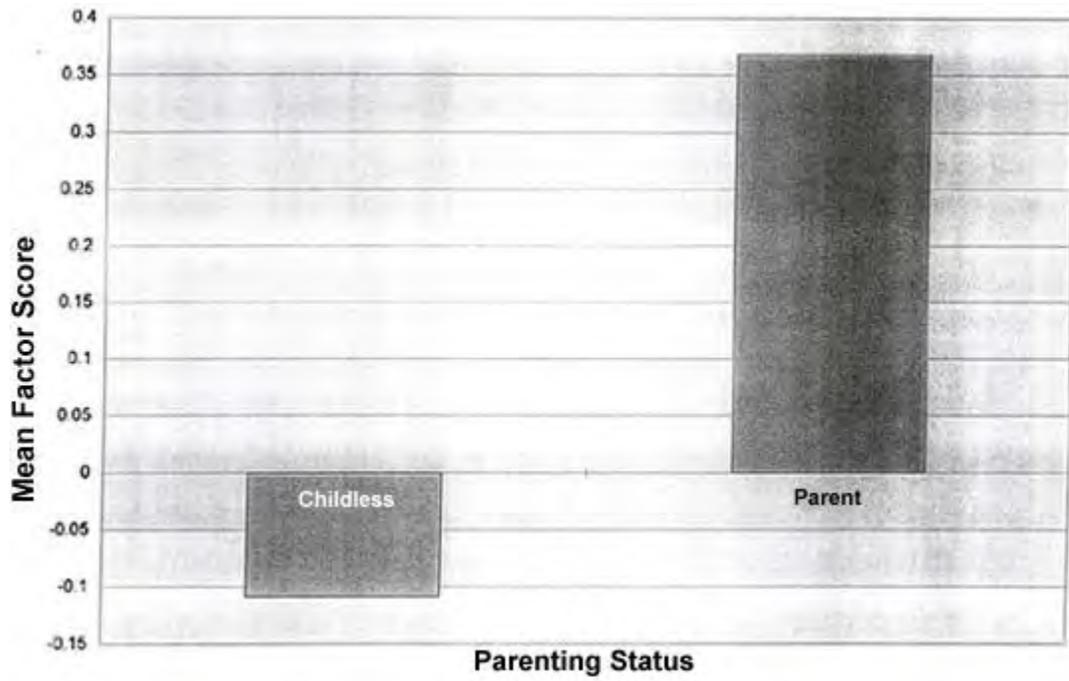


Figure 14

Mean Factor IV - Factor Scores Grouped by Income Category

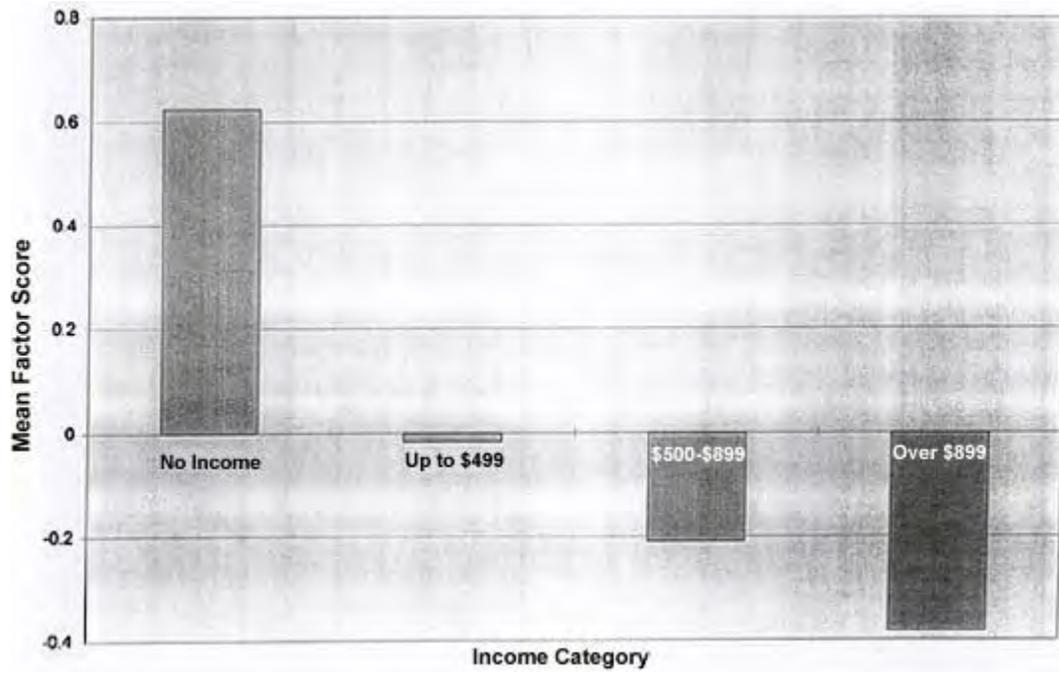


Table 10

Significant Comparisons Mean Factor 11 - Factor Scores by Setting and Reported Maternal Reading Level

<i>Pairwise Comparison</i>	<i>Mean Difference</i>	<i>Probability</i>
Rural Mother Read Well vs Rural Mother Read Poorly	-1.447	0.014
Urban Mother Read Well vs Urban Mother Read Poorly	2.328	0.018
Urban Mother Read Poorly vs Rural Mother Read Poorly	2.623	0.003

An examination of Figure 12 reveals that within setting the slope of the graph reversed from Mother Reads Well to Mother Reads Poorly; the slope of the rural group is negative and the slope of the urban group is positive. The reversal in sign of the mean scores ended at a significant difference across setting groups when they reported Mother Reads Poorly.

The one main effect found for Factor III (*Situational Barriers*), is shown in Figure 13. The mean factor score of those with no parental responsibilities was negative, while the mean factor score of those with children was positive.

The two significant main effects on mean factor scores for Factor IV (*Low Perception of Need*) were reported monthly income category and current participation in ABL classes. These are shown in Figure 14 and 15. The mean factor score of those with no reported monthly income was positive on Factor IV, and mean factor score became increasingly negative as reported monthly income increased (see Figure 14). Factor scores of those reporting they were currently participating in ABL classes were on the mean positive, as opposed to those reporting no current participation in ABL (see Figure 15). The significant interaction effect of setting and current participation in skills upgrading classes on Factor IV mean factor scores is indicated in Figure 16. As with many previous interaction effects, the slopes of the two graphs reversed. Significant Tukey HSD pairwise comparisons (see Table 11 and Figure 16) indicated mean factor scores of nonparticipants differed by setting, with a positive mean factor score for the urban group and the opposite for the rural group of nonparticipants. Urban nonparticipants also differed significantly from rural participants. The mean factor score of the rural participants was also positive, but less so than that of the urban nonparticipants. Within setting group, the urban participants and nonparticipants differed significantly, with the mean factor score of urban participants negative.

Figure 15

Mean Factor IV - Factor Scores Grouped by Current Participation in ABL

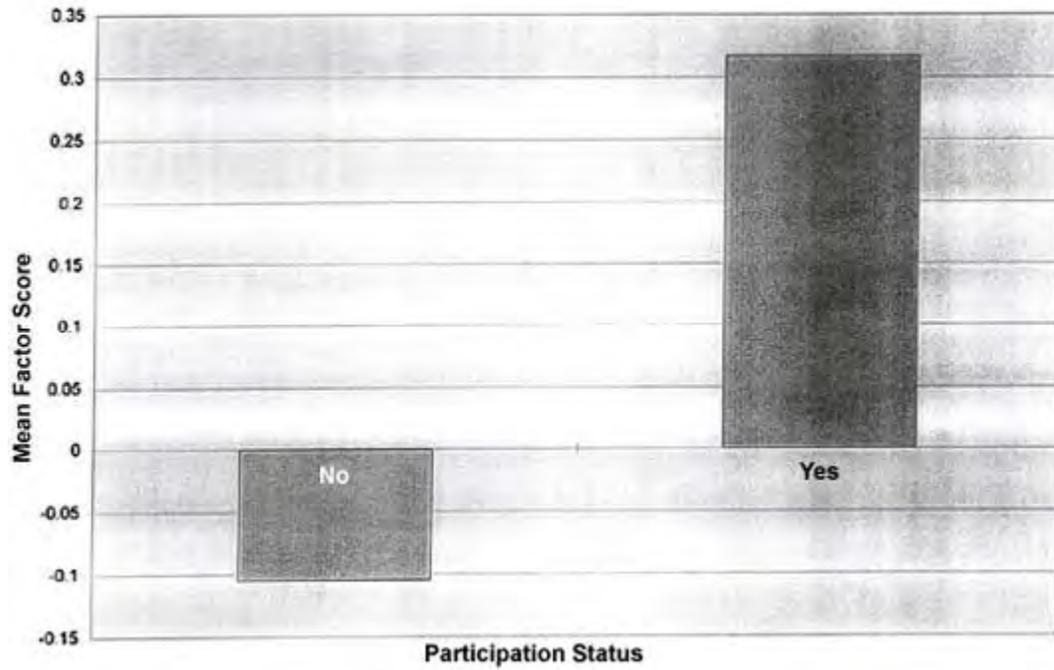


Figure 16

**Mean Factor IV - Factor Scores Grouped by Setting and Current Participation in Skills Upgrading Classes**

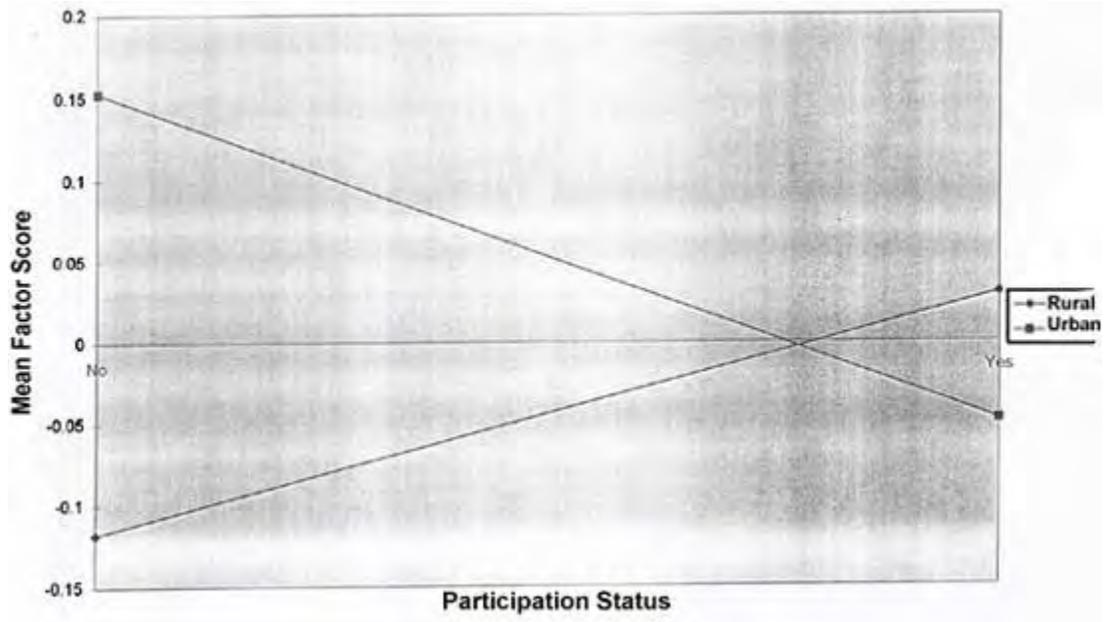


Figure 17

Mean Factor IV - Factor Scores Grouped by Setting and Work Status

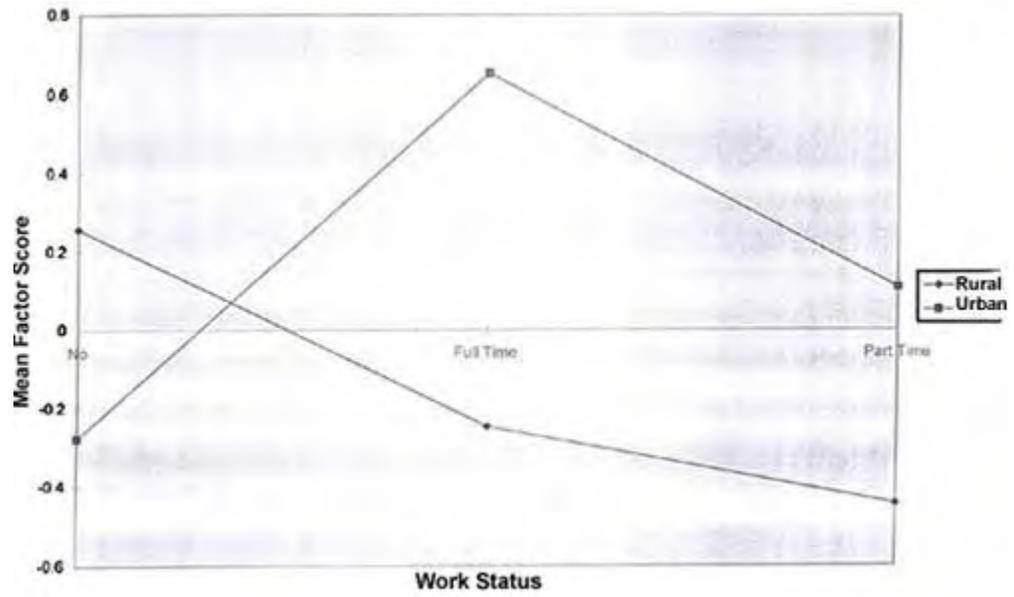


Table 11

Significant Comparisons Mean Factor IV - Factor Scores by Setting and Current Participation in Skills Upgrading Classes

<i>Pairwise Comparison</i>	<i>Mean Difference</i>	<i>Probability</i>
Rural Nonparticipants vs Urban Nonparticipants	1.357	0.002
Urban Nonparticipants vs Rural Participants	1.155	0.045
Urban Nonparticipants vs Urban Participants	-1.344	0.005

The significant interaction effect of setting and work status on Factor V (*Psychosocial Barriers*) mean factor scores is shown in Figure 17. Tukey HSD pairwise comparisons were not significant. It appears once again that the interaction effect is due to the overall differences in slope between groups.

To conclude, numerous significant effects were found between the pre-adulthood and adulthood variables and the individual factor scores. Factor I (*Dislike for School*) differed according to age, parenting responsibilities, and reading ability. Factor II (*Perceived Effort Within Class-Self Confidence*) was the most influenced by the diverse demographic variables. Factor II differed according to participation or nonparticipation in skills upgrading classes. The other main effects, of reading ability, were constrained by the complex interaction effect on Factor II of the reading scores with setting. Significant interaction effects on Factor II of setting with participation in ABL classes and with Reported Maternal Reading Level were also found. A significant main effect of parenting responsibilities on Factor III (*Situational Barriers*) was found. Significant main effects of Reported Monthly Income and participation in ABL classes on Factor IV (*Low Perception of Need*) were found. An interaction effect on Factor IV of setting with participation in skills upgrading classes was also significant. Lastly, Factor V (*Psychosocial Barriers*) differed significantly due to the effect of setting in combination with work status. No significant effects of the adulthood and pre-adulthood variables on Factor VI (*Perceived Effort Beyond Class*) were found.

## Anecdotal Evidence

Subjects were invited to comment on the research, and to add any barriers they had experienced that they felt were not included on the "reasons for nonparticipation scale". Upon examination, 80 of the comments were actual barriers to participation (see Appendix F for a complete listing). Of these, 57 (71.25%) could either be included within the factor structure as additional barriers or they duplicated items on the "reasons for nonparticipation scale". For example "school was boring" or similar comments were classed as *Dislike for School* items, while the comments classed as Factor II (*Perceived Effort Within the Class Self Confidence*) were primarily reiterations of items from the "reasons for nonparticipation scale" (see Appendix F). Several comments classed as Factor III (*Situational Barriers*) referred to health problems, a barrier not addressed in the "reasons for nonparticipation scale". Three other identifiable categories were also found. Five subjects reported they were planning to return, three subjects expressed a desire to have volunteer programs "legitimized" with credit for completion or for group classes in such settings, in addition to tutoring, eight subjects expressed a hesitation to return to school because of negative childhood schooling experiences unrelated to the school institution. These latter barriers included negative social interactions with other students, but were not expressed as *Dislike for School*. Therefore, they could not be included as part of that factor. Approximately 9 comments were classed as "other" in that they could not be categorized. They included such comments as "Nobody ever tried to teach me to read and write" and "Its easier to leave school as an adult if you are frustrated".

## Discussion

Initial analyses revealed differences across setting indicating that the low literacy populations differed in the rural and urban settings. Therefore, before addressing the research questions, it was necessary to explore the implications of these differences.

The differences across setting included the following. The rural sample consisted of fewer males and more females than the expected, while the urban sample consisted of more males and fewer females than the expected. Related to this, more than the expected number of the rural sample reported living in spousal relationships, and more than the expected number of females reported such a living arrangement. In contrast, more of the urban sample than expected reported alternate living arrangements, in particular they reported living alone, or in jail. The rural sample reported past experience with literacy training with greater than the expected frequency in contrast to the urban sample. Also, the rural sample reported higher incomes with more than the expected frequency, while the urban sample reported very low incomes with greater than the expected frequency. These all may reflect true differences between the low literacy populations across settings, but an alternative hypothesis may also explain the findings.

It is certainly possible that more females live in committed relationships, or that more members of the traditional rural society live in such relationships. However, because the urban sample consisted of more males, many of whom reported alternate living arrangements, the differences across the two samples may also be an artifact of the data collection. Although the precise nature of the relation of living arrangement with setting and gender cannot be determined with this data, it is possible that the kinds of groups used to contact the rural and urban samples may account for this confound. The urban sample included incarcerated males (approximately 12% of that sample) and an indeterminate number of homeless "street kids" contacted at drop in centers. The rural sample consisted primarily of individuals participating in literacy programs or youth employment programs, or living in all female group homes. Attempts to contact "street kids" in the rural sample proved fruitless; drop in centers similar to those in the urban area were not available and public data collection sites such as shopping malls did not result in their recruitment. It is unclear whether the rural area does not have "street kids" possibly due to the more traditional rural society, or has so few because of the smaller population that there are limited services in place for them. Regardless of the reason, the urban groups used to contact the sample resulted in more males, and more in alternate arrangements while the rural groups used to contact the sample resulted in more females, and more in spousal relationships.

The rural sample reported significantly more past ABL experience than the expected, while the urban population reported significantly less than the expected. Given that literacy level did not vary by setting, this finding lends support once again to the hypothesis that the setting differences may be the result of subject recruitment. Therefore it is likely this difference resulted because much of the rural sample was contacted through literacy agencies.

Despite the fact that employment status did not differ between settings, more than the expected individuals in the urban sample reported very low income, and fewer than the expected individuals in the rural sample reported similarly low income. It is probable that this resulted because the "street kids" in the urban sample would not receive a guaranteed income. People must have an address to receive social income support. Once again, it is feasible that this difference across setting reflects the nature of the groups contacted for the urban and rural samples.

The total sample differed significantly on several Adulthood variables (Darkenwald & Merriam, 1982) unrelated to setting. Regardless of setting, subjects who reported past literacy training also reported higher than the expected frequency full-time employment. In addition, more than expected who reported no previous literacy training reported monthly incomes less than five hundred dollars while more than the expected frequency reporting previous literacy training gave their salaries as greater than five hundred dollars monthly. We might conclude that these provide evidence that literacy training promotes employability and hence increased monthly income. However, the finding that more people than the expected with two children reported previous literacy training, causes pause. While it is possible that past literacy training has made those individuals more employable, an alternate hypothesis that this is the result of maturity is suggested, especially in light of the apparent impact of such training on parental responsibility. With increasing age, more than the expected numbers of subjects reported experience with past literacy training. It is likely that the effect of age has confounded the effect of past literacy training on these other maturity-related variables. The older one is, the more likely one will have had some experience with literacy training and the more likely it is that one will have found employment, accrued a higher monthly income and have family responsibilities. It is very possible therefore that age is the underlying variable in all these relationships.

The hypothesis of an age confound may also account for the findings that while living arrangement varied significantly according to age (more than the expected frequency living with a spouse were older and less than the expected frequency living with a spouse were younger) and number of children varied by living arrangement (more in spousal relationships also reported one or two children), yet number of children did not increase with age of the subject.

As one would expect, work status significantly impacted on reported monthly income. Reported monthly income also differed significantly according to number of children. While it is tempting to say that those with more children have sought full-time work and consequently have higher monthly incomes because of their parenting responsibilities, this explanation may not be accurate, given that for the total sample, the number of children reported did not differ significantly between those working full-time, those working part-time, and those unemployed. Thus, it is likely that the effect of higher monthly income for those with more children is at least partially the result of the guaranteed income being higher for unemployed individuals who have children.

To conclude, the total sample differed across ages in past experience with literacy training and in living arrangements. The significant positive relations of work, number of children, reported monthly income with past literacy training and the positive relation of number of children with increased number living in spousal relations, are all likely the result of an age confound. The setting differences in past literacy training, gender distribution, reported monthly income and living arrangements, as well as the gender difference in living arrangement most probably reflect the nature of the groups from which the two samples were drawn, or they may indicate true differences in the two populations, as does the significant difference in first language across setting. Regardless of whether these variables differ as the result of confounds, or reflect true differences in the low literacy populations, it was necessary to control them in analyses conducted to address the research questions. The discussion that follows will address each of those research questions in turn.

### Reasons for Nonparticipation

The reasons for nonparticipation given the greatest weight by Southwestern Ontario youth (see Table 6) do support the Psychosocial Interaction Model (see Figure 1) proposed by Darkenwald and Merriam (1982). They also reflect our society's archetypal barriers to education. On the main, the items with a mean response over 2.5 (on the 5-point Likert scale) reflect a negative attitude toward self or school, lack of time or resources, and lack of information concerning class availability. These 12 items include psychosocial, situational, informational and perhaps institutional barriers, as they have been defined in the model.

If we were to end our analyses with the tabulation of mean response and standard deviation, as do many research reports (e.g. see Fick, 1994; Sawyer & Rodriquez, 1992/1993), we might conclude that individually addressing those items given the greatest mean weights would result in increased participation. For example, the informational item "*I don't know anything about adult classes*" could be taken to suggest a need for more and improved advertising; the situational item "*I have to take care of my family*" suggests a need for daycare or other assistance with family responsibilities.

Such a conclusion is questionable however, considering the factor structure derived from the correlations of item responses (see Table 7). When the items are grouped in factors the informational items "*I don't know anything about adult classes*" and "*I haven't know where there are any classes*" actually are related to what Darkenwald and Merriam (1982) would call psychosocial items in a factor defined post hoc as *Perceived Effort Within Class-Self Confidence*. Thus the information barrier is not necessarily a lack of advertising. The barrier instead is most likely to be the inability of potential students to listen to the advertising due to their lack of self confidence. This was suggested as a possibility by Darkenwald and Merriam (1982). Until the self confidence issue is addressed, no amount of advertising will increase participation.

Even though the factor structure is far less complex a picture than the mean scores and ranks of the 32 items, it still indicates that the reasons for nonparticipation are multidimensional in nature. Moreover the structure of the barriers does differ from that hypothesized by Darkenwald and Merriam (1982), at least with a sample of Southwestern Ontario youths.

The six factors can be divided into three groups of factor magnitude based on the mean item score. Those of primary importance were *Psychosocial Barriers*, *Dislike for School*, and *Situational Barriers*. Those of moderate importance were *Perceived Effort Within Class - Self Confidence*, and *Perceived Effort Beyond Class*. The factor *Low Perception of Need* was the least important. Within these factor magnitude groups are separate factors (for example *Psychosocial Barriers* and *Dislike of School*, *Perceived Effort Within Class - Self Confidence* and *Perceived Effort Beyond Class*; *Low Perception of Need*) all of which would be termed psychosocial according to the Darkenwald and Merriam (1982) model. None of the factors could be described as either informational or institutional; informational items are grouped as part of a self confidence issue. Also, while a situational barrier did emerge in the factor analysis, several items we would have classed as situational according to the theory loaded on factors other than the *Situational Barriers* one. Thus *Perceived Effort Beyond Class* in reality is a combination of items theoretically categorized as situational and psychosocial. Also, "*I have to take care of my family*" loaded on *Dislike for School* even though in theory it is clearly situational. Therefore, we can conclude that for our sample of youths the barriers to participation are more complex than the four theoretical barriers discussed in the Psychosocial Interaction Model (Darkenwald & Merriam, 1982). This finding is consistent with the results of research conducted with different populations (e.g. see Beder, 1990; Hayes & Darkenwald, 1988; Scanlan, 1986).

While our data supported a six factor solution, and Beder (1990) reported a solution with four interpretable factors, our results are clearly consistent with Beder's (1990) findings and those of Hayes and Darkenwald (1988). Beder (1990) reported the factors *Low Perception of Need*, *Perceived Effort*, *Dislike for School* and *Situational Barriers*. Beder's (1990) *Low Perception of Need* contained items found in our Factor IV - *Low Perception of Need* and in our Factor V - *Psychosocial Barriers* (see Table 7). Beder (1990) concluded that in his sample *Low Perception of Need* was clearly positively related to age; with increasing age the individual adapts to a state of low literacy skills and perceived need for further education decreases. Considering this conclusion, it is logical that the age items split out into *Psychosocial Barriers* for our sample of youths. Also, the split of Beder's (1990) *Perceived Effort* factor into our Factor II - *Perceived Effort Within Class - Self Confidence* and Factor VI - *Perceived Effort Beyond Class* (see Table 7) is intuitively logical. Beder (1990) himself recognized that items within his *Perceived Effort* factor were of two conceptually different types.

We can conclude that our factor solution has in essence replicated that of Beder (1990) despite the varied natures of the two samples. The difference in number of factors between the two solutions is the result of two of Beder's (1990) factors splitting along lines that were intuitively logical based on sample characteristics, and were explained in the discussion of his factors. Therefore, we can begin to place some confidence that the factor structure describes reasons for nonparticipation across populations.

The results of Hayes (1988) cluster analysis revealed a group of low literate participants who were young, with a mean age of 18.2 years, and had experienced deterrents unique to that group. They reported "social disapproval" and "attitude to classes" as their primary deterrents, unlike any other group. This may in part explain our finding of our factors, in comparison with those of Beder (1990). Beder (1990) reported two groupings by order of magnitude with *Low Perception of Need*, *Perceived Effort*, and *Situational Barriers* of equal and primary importance. In contrast, we found *Dislike for School* to be of primary importance. Thus, our sample of youths and the unique cluster of young participants Hayes (1988) discovered both reported "attitude to classes" or *Dislike of School* as a primary reason for nonparticipation.

Our findings that the *Low Perception of Need* items unrelated to age were of the least importance while Beder (1990) found *Low Perception of Need* to be of primary importance is once again likely to be due to the positive relation of this factor with increasing age. Therefore, the importance of the factors as determined by their mean item scores, did differ between our study and that of Beder (1990) but the differences were in logical directions given the natures of the two samples. In addition, the differences were supported indirectly by the results of other research (Hayes, 1988).

Factor I - *Dislike for School* was the only one found to vary according to the age category of the respondent (see Figure 3). We proposed earlier that the primacy of Factor I as a deterrent to participation was particular to a young population. The determination of a significant age effect supports that hypothesis. It appears that not only is the effect particular to a youth population, but moreover that the primacy of Factor I - *Dislike for School*, is particular to youths aged 16 to 20. No other factors varied dependent on age as main effects or as interaction effects. Thus, the factor structure (apart from Factor 1) was stable across the age categories despite an hypothesized age confound in the analysis of the demographic data.

Parenting responsibilities affected Factor I - *Dislike for School* (see Figure 4) and Factor III - *Situational Barriers* (see Figure 13). Those with children were less likely to report items indicating *Dislike for School*. Recall that age is controlled in this analysis, so the effect is not because those with children constitute an older group. It would seem that either the responsibilities of parenting or the effect of maturation remove the individual sufficiently from the school experience that the negative perception of school diminishes. That other barriers replace *Dislike for School* is evidenced by the effect of parenting responsibilities on Factor III - *Situational Barriers*, which are given significantly greater weight by those with children. Parenting Responsibilities did not affect any other factors.

When age and setting were controlled, reported living situation did not affect any of the factors. It had been anticipated that living in a spousal relationship or in alternate situations, as opposed to living at home might result in greater weight being given to Factor III - *Situational Barriers*. That this was not the case suggests that for our sample of youths, living with parents carries responsibilities similar to those experienced by the youths living away from home.

Factor IV - *Low Perception of Need* factor scores were significantly affected by reported monthly income category. It is evident (see Figure 14) that those reporting no income also responded positively to *Low Perception of Need* items, and the response to these items became increasingly negative as income increased. Recall again that age is controlled; this is not a maturity effect. It is possible that the situation of those with no income is such that worries about everyday living override a perception of need for schooling. However if this was the case we would expect to see an effect of reported monthly income on Factor III *Situational Barriers*. This was not the case. Another explanation may be that those with income (particularly if they are working) are more aware of the realities of our society and therefore perceive the need for continuing education. No other factors varied according to reported monthly income, and only one setting by employment status effect was found. Factor V - *Psychosocial Barriers* differed dependent on whether the individual lived in the rural or urban setting and whether they were working either full-time, or part-time, or were unemployed (see Figure 17). The rural group responded positively to these items when unemployed, but made negative responses to these items when employed. In contrast, the urban group responded negatively to these items when unemployed and positively when employed. Perhaps this indicates that in the urban social milieu work and school are considered to be mutually exclusive. On the other hand in the rural social milieu many individuals are seasonally

employed and return to school in the off-season. Therefore, work and school may be less likely to be considered mutually exclusive. No other main or interaction effects were found for either reported monthly income or employment status and the factor scores.

No significant main effects of setting on the individual factor scores were discovered. However, setting did interact with a number of demographic variables in their effects on the individual factor scores. Considering the hypothesized setting confound in the demographic variables such a result was not surprising. Each of these interactions will be considered in turn in response to the research question appropriate to the variable with which setting interacted.

No significant main or interaction effects were found on any of the factors when the respondents were categorized according to whether they were or had been participants in adult education, as opposed to those who had never participated in adult education. Therefore the factors did not differ according to retrospective report as opposed to report of current factors.

Figure 8 illustrates a main effect of current participation in skills upgrading classes on Factor II - *Perceived Effort Within Class-Self Confidence*. Nonparticipants in skills upgrading classes tended to report self confidence as an issue while participants did not recall overcoming such a barrier (see Figure 8). The interaction effect of setting and current participation in skills upgrading classes on Factor IV is illustrated in Figure 16. Urban nonparticipants differed from the rural nonparticipants and from all participants on Factor IV - *Low Perception of Need* (see Figure 16). Urban nonparticipants in skills upgrading classes did not perceive the need for such continuing education, in contrast to the other groups, which did not differ from each other.

Figure 15 illustrates a main effect of current participation in ABL on Factor IV - *Low Perception of Need*. Nonparticipants in ABL tended to have negative factor scores on *Low Perception of Need*; current participants in ABL did recall overcoming this barrier. Setting interacting with current participation in ABL classes significantly effected factor scores on Factor II - *Perceived Effort Within Class-Self Confidence* (see Figure 11). Rural nonparticipants on the mean cited self confidence issues as a barrier. Urban nonparticipants on the mean did not cite such issues as a barrier. The barriers reported by current participants were opposite in direction. Rural participants did not cite having to overcome self confidence issues, on the main, while urban participants did.

No main effects or interaction effects were found for reported paternal reading level. We were unable to assess the effect of spousal reading level because no meaningful grouping of the data could be found that supported the analyses with sufficient numbers in each cell. No main effects were found for reported maternal reading level. The significant interaction effect of setting and reported maternal reading level on Factor II - *Perceived Effort Within Class-Self Confidence* is illustrated in Figure 12. A significant between groups comparison was found for those reporting a poor maternal reading level. Urban

respondents cited self confidence barriers under this condition, while rural respondents did not. This may reflect the cultural differences between the two settings, and the particular cultural composition of the rural sample. The rural sample differed significantly from the urban one on first language; many of those in the rural sample were Mennonites from Mexico. It is possible that it was expected that women of their mothers' generation did not read well for that group of respondents. Because such a situation was expected, it did not affect their self confidence. This contrasts with the urban population, most of whom reported English as their first language. For them, it is likely that women of their mothers' generation were expected to have participated in the education system, and poor maternal literacy skills did impact upon self confidence.

Another way to view this difference may be to consider that the culture of the Mennonites from Mexico was an oral culture, in contrast to the urban culture which was likely to have been predominately literate. Obviously, children in the oral culture would gain self confidence by learning skills important to that culture. Such skills would not require maternal literacy in order that she guide the child. This early achievement of the child would generalize as self confidence as an adult. The urban group on the other hand were likely to be immersed in a literate culture, and as children they did not have the maternal guidance (mother reads poorly) required for them to excel at the skills important to a literate society. Thus they did not attain the generalized self confidence as an adult.

Literacy level assessed as the LWR-Revised did affect Factor I - *Dislike for School* (see Figure 5). Those at LWR-Revised I indicated that *Dislike for School* was not a barrier, while it was for those at LWR-Revised 5. Therefore for respondents who read fairly well, the reason for nonparticipation in adult education was discomfort with school as an institution. The conclusion that those whose literacy level is at the lowest level are likely to experience barriers other than this discomfort with school as an institution is supported by the main effects of literacy level on Factor II - *Perceived Effort Within Class-Self Confidence*, illustrated in Figures 6 and 7. These main effects cannot be considered without reference to the interaction effect of setting on literacy level, but within the urban and rural populations the factor scores differed significantly between LWR 1 and LWR 4 or LWR-Revised 5 (see Figures 9 & 10). Scores at the lowest literacy levels were positive on Factor II and became negative with improving ability, for each setting group. As we would expect then, the greater is one's reading ability, in either setting, the greater is one's self confidence.

A second source of variance that is more difficult to explain is the high mean factor score of the urban group reading at LWR3. The results of the recent international literacy survey may offer an explanation for several of the effects we have found.

Jones (1996) reported that close to 50% of the school leavers surveyed had low reading scores (level 2), and that that was the only reading level for which there were sufficient numbers to allow reliable reporting. Although their level 2 and our LWR2 are different, it suggests that for the group of school leavers, low literacy skills are a norm. The urban

LWR2 group and the urban ABL nonparticipant group both report self confidence is not an issue, and the urban skills upgrading nonparticipants do not perceive a need for continuing education. Perhaps these effects are all the result of the reference groups for these respondents. If nonparticipation is also the norm for their groups, in addition to low literacy, then we would expect them to report low perception of need and self confidence regarding their ability to pursue further education. Because they are "normal" in reference to their own group, they do not realize it would be difficult, or they simply do not feel they require further schooling.

In review, we found that our sample of Southwestern youths reported six identifiable factors as barriers to continuing adult education. It was possible to cluster these factors into three order of magnitude categories. Thus, our sample reported factors of primary importance (*Psychosocial Barriers*, *Dislike for School*, and *Situational Barriers*), of moderate importance (*Perceived Effort Within Class - Self Confidence*, and *Perceived Effort Beyond Class*), and the factor *Low Perception of Need* was the least important. While the factor structure was consistent with that found in previous research (Beder, 1990; Hayes & Darkenwald, 1988), the orders of magnitude did vary predictably based on the unique nature of our sample.

Despite the apparent age confound in the analyses of the demographic data, only one factor, Factor I - *Dislike for School* varied according to age. This tended to be a barrier reported by the 16 to 20 year old group. Parental responsibilities (even with age controlled) resulted in a reduced tendency to report *Dislike for School* as a barrier, and an increased tendency to report Factor III - *Situational Barriers*. Increasing income resulted in a decreasing tendency to report Factor IV - *Low Perception of Need*; employment status interacted with setting in an effect on Factor V - *Psychosocial Barriers*. In general, employed urban individuals reported they felt strange about returning to school, while employed rural individuals did not report they felt strange about returning to school. Those currently participating in ABL classes tended to agree that Factor IV - *Low Perception of Need* was a barrier they had had to overcome. Setting interacted with current participation in ABL classes in an effect on Factor II - *Perceived Effort Within Class - Self Confidence*. Urban ABL participants tended to agree they had overcome this barrier; rural participants did not report this as a barrier they had overcome. The opposite applied to nonparticipants from the two settings. Those presently attending skills upgrading classes reported somewhat different factors. In concert with rural nonparticipants they do not report having overcome a *Low Perception of Need*, but they also tended to disagree with self confidence as an issue. All nonparticipants reported self confidence issues, and urban nonparticipants reported *Low Perception of Need*. While this might lead us to assume that the urban "street kids" are more concerned about the daily round of finding food and shelter, this is not supported by an effect on Factor III - *Situational Barriers* in concert with this low perception of need. Self confidence was a particular issue for urban individuals who reported a poor maternal reading level. *Dislike for School* was reported as a barrier for those with an LWR-Revised score of 5, while *Perceived Effort Within Class - Self Confidence* was reported as a barrier for those with LWR scores of one, two, and three. Literacy level also interacted with setting in an effect upon self confidence. This effect is complex and may reflect different social expectations regarding literacy across the two samples.

Taken as a whole, the factors describe barriers that are strongly psychosocial. Youth report reasons for nonparticipation that describe a negative attitude toward school as an institution or toward themselves as learners. They also describe situational barriers. What is very striking is that our sample gave very little weight to Low Perception of Need items. In other words, most of them realized they did require continuing adult education.

The results of the ANOVA analyses indicate that the *Dislike for School* barrier, the *Perceived Effort Within Class-Self Confidence* barrier and the *Psychosocial Barrier* all result from complex developmental processes. Solutions to these barriers will be neither simple nor immediate. For example the link of self confidence with literacy level and with maternal literacy level suggests the importance of early childhood education programs. These include programs such as preschools, Junior Kindergarten and the Head Start program in the United States. Similarly, the link between a negative perception of school as an institution and age suggests that when these individuals are still in school, and more essentially, when they are leaving school, an effort must be made to make the school, as an institution, a welcoming and comfortable place to which they know they can return. The impact of such actions on barriers to participation will be long term in nature. The implementation of these actions would be difficult in a time of reduced spending.

On the short term, programs such as bridging the student from one on one tutoring to classroom independence may serve to increase self confidence and reduce the negative perceptions of school, and of self. Certainly, the comments of the respondents indicated that many were more comfortable participating in volunteer programs. This may be because such programs were removed from the school building they associated with the institution of school. It may also be the result of increased flexibility in scheduling "class time". Flexible programming, with increased emphasis on Correspondence programs would serve those individuals who have difficulty making time for school, or move too frequently to become involved in an established community program. The process of registration for these programs must be streamlined and simplified to avoid discouraging individuals with low levels of self confidence. Perhaps too, our advertising for these programs needs to "go underground" into the oral subculture of these individuals. Just as we contacted respondents through individuals they knew, and at the local mail, this may be a channel for advertising to which they would listen. To go a step farther, store front classes might make classes more accessible to youth. Perhaps at first they need to take classes in their environment, rather than in ours.

Above all, we need to recall that groups within our sample reported different needs. The sample was not homogenous in its responses concerning barriers to participation. Therefore in any program planning the specific needs of the particular target group must be considered.

It is necessary now to take all of these suggestions, and any other feasible solutions, and try to incorporate them into a Campaign for Youth Literacy. Such a campaign plan would allow us to make a coordinated push in the battle to increase the skills of our young population. Once this battle plan was devised, it should be tested in a controlled experimental implementation. Further research should also be conducted concerning the reasons for nonparticipation with differing samples. These should be samples from different regions with similar characteristics to our sample, and with samples of differing characteristics.

Replication of the factors would further confirm their validity.

## References

- Beder, H. (1990). Reasons for nonparticipation in adult basic education. Adult Education Quarterly, 40(4), 207-218.
- Calamai, P. (1990). Broken words: Why five million Canadians are "illiterate". The Southam literacy report (revised). Toronto: Southam.
- Charner, I. & Fraser, B. S. (1986). Different strokes for different folks: Access and barriers to adult education. A paper submitted to the Congress of the United States, Office of Technology Assessment by the National Institute for Work and Learning. An Institute of the Academy for Educational Development.
- Couillard, R. (1990). The 1990 adult education and training survey. (Report LM-250-05-93E). Statistics Canada.
- Darkenwald, G. G. (1986). Adult literacy education: A review of the research and priorities for future inquiry. New York: Literacy Assistance Centre.
- Darkenwald, G. G., & Merriam, S. B. (1982). Adult education: Foundations of practice. New York: HarperCollins.
- Fick, K. (1994). Barriers to literacy as told by students and tutors of the adult basic literacy program. Tillsonburg. Unpublished manuscript.
- Gammage, A. (1992). Social indicators of literacy needs. A project to examine literacy needs of Northwestern Ontario member communities. Toronto: Ontario Dept. of Education. (ERIC Document Reproduction Service No. ED 382 870).
- Goody, J. (1987). The interface between the written and the oral. Cambridge: Cambridge University.
- Hayes, E. R. (1988). A typology of low-literate adults based on perceptions of deterrents to participation in adult basic education. Adult Education Quarterly, 31(1), 1-10.
- Hayes, E. R., & Darkenwald, G. G. (1988). Participation in basic education: Deterrents for low-literate adults. Studies in the Education of Adults, 20(1), 16-28.
- Jones, S. (1992). Survey of adult literacy in Ontario. Toronto: Queen's Printer for Ontario.

Jones, S. (1995). The distribution of literacy. in Literacy, economy, and society. Results of the first international adult literacy survey (pp. 55-85). Organization for Economic Co-operation and Development & Statistics Canada.

Jones, S. (1996). Demographic distributions of literacy in Canada, in Reading the future: A portrait of literacy in Canada (pp. 19-38). Ottawa: Statistics Canada.

Ladanchuk, S. L. (1986). What do youth really want in a literacy program? Perspectives from youth, youth workers and potential youth employers. Core Literacy Centre, Waterloo Region Inc.

Lay, K-L., Waters, E., & Park, K. A. (1989). Maternal responsiveness and child compliance: The role of mood as a mediator. Child Development, 60, 1405-1411.

Literacy and poverty: A view from the inside. The research report. (1992) Ottawa: National Anti-Poverty Organization.

McLeod, J. (1991). Achievement, barriers and challenges: Young people and literacy. Victoria: Youth Affairs Council of Victoria.

Murphy, H. C. & Cool, J. (1991). Dropping out and dropping in: A study of youth and literacy. L. Ross (ed.) A report submitted to the National Literacy Secretariat by the Canadian Youth Foundation.

Norusis, M. J. (1985). SPSSX advanced statistics guide. New York: McGraw-Hill.

Quigley, B. A. (1995). Improving retention in adult basic education and recommended strategies for effective instructional and counseling interventions [and] reasons for resistance to attending adult basic literacy. Research in adult literacy. Ohio: Ohio Literacy Resource Center. (ERIC Document Reproduction Service No. ED 378 408).

Sawyer, D., Dougherty, C., & Lipa, S. (1987). Laubach way to reading: Diagnostic inventory. Teacher's manual. Syracuse, New York: New Readers.

Sawyer, D., & Rodriguez, C. (December 1992/January 1993). How native Canadians view literacy: A summary of findings. Journal of Reading, 36(4), 284-293.

Scanlan, C. L. (1986). Deterrents to participation: An adult education dilemma. ERIC Clearinghouse on Adult, Career, and Vocational Education, Information Series No. 308. Columbus, Ohio: The National Center for Research in Vocational Education, Ohio State University. (ERIC Document Reproduction Service No. ED 272 768).

Wikelund, K. R., Reder, S., & Hart-Landsberg, S. (1992). Expanding theories of adult literacy participation: A literature review. (Technical Report TR92-1). Philadelphia: National Center on Adult Literacy.

# Appendix A

## Demographic Questionnaire

Question Sheet #1

Respondent #

**I am:**  Male  Female

**I was born in Canada:**  Yes  No

**I am a member of Canada's First Nations:**  Yes  No

**My first language is:**  English  French  German  Other

**I can talk in:**  English  French  German  Other

**I am:**  16  17  18  19  20  21  22  23  24  25  
yrs old

**I am living:**  with my spouse  with one or both parents  with other relatives  
 with friends  in a group home  alone

**I have:**  0  1  2  3  4 or more children

**I work:**  full time  part time  I am not working

**Each month I get:**  no money  less than \$500  \$500-\$899  \$900-  
\$1299  \$1300-\$1699  \$1700-\$20000  over \$20000

**I study:**  full time  part time  I am not studying

**I am taking reading classes:**  Yes  No

**I am taking skills upgrading classes:**  Yes  No

**I have taken reading classes in the past:**  Yes  No

**I was:**  16  17  18  19  20  21  22  23  24  25  
yrs old when I started taking classes

**My mother reads:**  very well  well  fairly poorly  don't know

**My father reads:**  very well  well  fairly poorly  don't know

**My spouse reads:**  very well  well  fairly poorly  don't know  I am  
not living with a spouse

## Appendix B

### "Reasons for Nonparticipation" Scale

1. I don't have enough energy to back to school.
2. I would feel strange going back to school.
3. I am usually too tired to go back to school.
4. I am not motivated enough to go back to school.
5. I am too old to go back to school.
6. I move around too much to go back to school.
7. I don't think I am smart enough to go back to school.
8. School is too hard.
9. I couldn't pay for child care or transportation.
10. I don't think I could use the things I would learn in school.
11. I am too set in my ways to go back to school.
12. I just don't like school.
13. I don't need a diploma.
14. I don't have enough free time to go back to school.
15. Going back to school would be like going to high school all over again.
16. There aren't many people in adult classes who are my age.
17. My friends would laugh at me if I went back to school.
18. I felt that my family wouldn't like it if I went back to school.
19. It would cost me too much money to go back to school.
20. I have too many time conflicts at work to go back to school.
21. I don't go back to school because nobody knows that I don't already have an education.
22. I didn't think that school would be very good.
23. It would take me too long to finish high school.
24. A high school diploma wouldn't improve my life.
25. I didn't like school so I don't want to go back.
26. There is too much on my mind to go back to school.
27. I don't know anything about adult classes.
28. Going back to school wouldn't make me any smarter.
29. I am too lazy to go back to school.
30. I haven't known where there are any classes.
31. I have to take care of my family.
32. I already know enough.

# Appendix C

## Laubach Way to Reading (LWR) Screening Lists

Student's name \_\_\_\_\_

Date \_\_\_\_\_

Person administering \_\_\_\_\_

<b>List 1</b>	<b>List 2</b>	<b>List 3</b>	<b>List 4</b>
_____ 1. in	_____ 1. glass	_____ 1. cry	_____ 1. about
_____ 2. is	_____ 2. send	_____ 2. loaf	_____ 2. bought
_____ 3. the	_____ 3. dropped	_____ 3. die	_____ 3. shook
_____ 4. a	_____ 4. far	_____ 4. flight	_____ 4. gentle
_____ 5. to	_____ 5. running	_____ 5. eleven	_____ 5. cough
_____ 6. has	_____ 6. after	_____ 6. future	_____ 6. thumb
_____ 7. her	_____ 7. quick	_____ 7. menu	_____ 7. weigh
_____ 8. this	_____ 8. girls	_____ 8. money	_____ 8. schedule
_____ 9. she	_____ 9. then	_____ 9. retiring	_____ 9. wrong
_____ 10. his	_____ 10. hurry	_____ 10. shook	_____ 10. pressure
	_____ 11. which	_____ 11. snow	_____ 11. league
	_____ 12. were	_____ 12. table	_____ 12. excuse
	_____ 13. dishes	_____ 13. zero	_____ 13. annoy
	_____ 14. work	_____ 14. sleep	_____ 14. choose
	_____ 15. from	_____ 15. paint	_____ 15. ache
			_____ 16. crawl
			_____ 17. beautiful
			_____ 18. hour

\_\_\_\_\_ 19. above

\_\_\_\_\_ 20. argue

Total Correct: \_\_\_/10    Total Correct: \_\_\_/15    Total Correct: \_\_\_/15    Total Correct: \_\_\_/20

Mastery Level: 9/10    Mastery Level: 13/15    Mastery Level: 13/15    Mastery Level: 18/20

The chart below explains how to use a student's LWR Screening Lists score.

- List 1:**    9-10 - Go on to List 2.  
              0-8 - Administer Student Reading Profile 1.
- List 2:**    13-15 - Go on to List 3.  
              8-12 - Administer Student Reading Profile 2.  
              0-7 - Administer Student Reading Profile 1.
- List 3:**    13-15 - Go on to List 4.  
              8-12 - Administer Student Reading Profile 3.  
              0-7 - Administer Student Reading Profile 2.
- List 4:**    13-20 - Administer Student Reading Profile 4.  
              0-12 - Administer Student Reading Profile 3.

## Appendix D

### Group Administration of the Questionnaires

*Begin by thanking them for their help, introducing yourselves, that you need to read the instructions etc. because there are 3 or 4 of us doing this, and we all need to do it the same way. For individual administration, you won't need the overhead-just sit with the respondent, and point on a copy of Question Sheet #1, or the Nonparticipation response sheet.*

OK, I'll start by giving you this letter. *(Distribute subject letter and read and/or summarize it).*

Does anyone have any questions about the letter? *(answer any questions).*

OK. We are asking you to sign this consent form. *(Distribute consent form and read it)*

Does anyone have any questions about the consent? *(answer any questions).*

OK then, please sign them we'll collect them. *(collect consent forms)*

Now, first we're going to have you in a group answering some questions about yourselves. This should only take a few minutes. You each have some answer sheets and a pencil at your place. If you look at your answer sheets you should see the same number on each. We call this your research number. Once again, please do not put your name on any of the answer sheets

After we have finished the group questions we will have the private sessions. It should only take around 10 minutes for each of you.

OK. Is everyone comfortable? Please get the first question sheet. It looks like this *(Put demographic questionnaire on overhead)*. The answers to these questions will tell us a little about you, so we can group the answers; for example as made by a male or a female. Remember, we're the only ones who will see these answers. Remember too, if you don't want to answer any particular question just leave it out. On Question Sheet #1 please check or circle the answer that tells us about you.

For example: (*on overhead*)

Question 1    **I am:**     Male     Female

I would check Female

or Question 8    **I have:**     1     2     3     4 or more children

I would circle 2 and so on.

Any questions before we start?

*(pause to answer questions then start reading questionnaire items. Point to each item on the overhead as you read it. Help subjects if necessary with reading and marking responses)*

OK, next we have the main set of statements. The statements describe reasons you might or might not take classes. When we say "school" in some of the items, we mean adult classes. Some might describe how you feel about yourself. You should have a set of answer sheets left that all look the same. They are a series of face pictures like these, (*e.g. on overhead*).

Each set is numbered from 1 to 32.

What we would like you to do is to listen to the statements we are going to read to you. Then, using these face pictures, you can show us how much you feel this statement applies to you. (*for those who have taken literacy training or skills upgrading -- how much you feel this statement applied to you before you started taking classes.*) The faces make a scale from 1 to 5 with (*point*) this really sad face meaning that you think the statement doesn't describe you at all, that you strongly disagree with the statement. This sad face (*point*) means you disagree with the statement. This neutral face (*point*) means Maybe -- you don't agree or disagree with the statement. This happy face (*point*) means you agree with the statement some. This really happy face (*point*) means you really agree with the statement, that it really describes you. Any questions?

For example: To the statement **I need a baby-sitter**

*(point to e.g. at top of first response sheet)*

you would circle the happy face (4) if this could be or was a problem for you if you took classes. That is, you agree with the statement somewhat.

**BUT** you would circle the very happy face (5) if this problem would keep (kept - *for those in classes*) you from taking classes altogether. That is, you really agree with the

statement.

Any questions?

OK, let's do the statements then. I'll read the statements one at a time, and you circle the answer showing how much you agree with the statement. Remember, its how well the statement describes things that are keeping (kept - *for those who have already taken training*) you from taking classes. If you have any questions about any of the statements, ask one of us for help. Please let me know if I am reading the statements too fast or too slow. (*Administer Questionnaire - i. e. read the Reasons for Nonparticipation statements -- make sure to answer any questions that may come up -- gauge the audience for pause time between items*)

OK that's it for the group questions. I want to thank you once again for your help. We hope to ask about 200 people these questions. Once we know the things that stop people your age from coming for classes, then we hope to create programs that would be easier to attend. We will tell the people at the (*name of agency*) the results for the group and you can ask them if you are interested in what we find out. Or, you can call one of us-the number is on the letter we gave you.

Let's start doing the individual reading screenings. While you wait, we have a snack for you. Please bring your answer sheets into the screening, so we can put your research number on the Screening List record.

If you have any comments - say reasons that might have applied to you that we haven't asked about, please let us know when you come in to the individual screening and we can record them on your response sheet (*For ABL students*). If you have any comments- say reasons that might have applied to you that we haven't asked about, please let us know before you leave and we can record them on your response sheet.)

Thank you for your cooperation. If you know any one you think might be willing to help with this project, could you either let us know so we can get in touch with them, or tell them about the project, and give them our telephone number. Its on the bottom of the letter we gave you at the beginning today.

## Appendix E

*Script for Administering the Laubach Way to Reading - Screening Lists The subject is screened individually using the following script Record the individual's research number on the screening record sheet. Record the words incorrect on the screening sheet numbered with that individual's research number. If at any time, on any list, the person has trouble with four words in a row, stop the screening and close the interview.*

If you feel comfortable, I am going to ask you to read some words. The purpose is to find out where you are in your reading.

Please read the words in List 1. If you do not know what a word is, then go on to the next word.

Thank you!

*Continue on to the next list if they were able to read most of the words.*

Please continue to read the words in List 2.

*Repeat for Lists 3 and 4 if the subject was able to read most of the words.*

*When finished:*

Thank you for taking to the time to read these words. It will help us with the study we are doing.

*Tillsonburg -- Give respondent the thank you letter with coupons enclosed.*

## Appendix F

### Anecdotal Reasons for Nonparticipation

#### Factor I - *Dislike for School*

- Found school boring.
- Length of school day too long./Teachers bugged her./Classes start too early in morning.
- Teachers harass you.
- School was boring.
- School is boring.

#### Factor II - *Perceived Effort Within Class-Self Confidence*

- After I had the time I was scared cause all the tutors were gone - I should have called.
- Scary thing/Felt uncomfortable about others finding out.
- Figured I couldn't do anything anyway.
- Didn't know if it cost so didn't go.
- Didn't know about classes.
- Low self-esteem - wasn't aware of adult classes.
- Not wanting people to know.

#### Factor III - *Situational Barriers*

- Transportation/time at work.
- Personal problems interfered
- Too much on her mind when children were young.
- Family commitments and personal difficulties.
- Personal/family problems.
- Time.
- Employment schedule.
- Summertime is too busy - planting and harvesting,
- Focusing on money.
- Doesn't have time.
- Working a lot.
- Trips to London for health reasons.
- Working, so no time.
- Didn't go back as found out I was pregnant.
- Worries about everyday life in general. Life is too much of a hassle to worry about school.
- Health reasons.
- Trying to concentrate on finding home and food before school/medical - suffering depression so can't go back.
- Stress and personal problems.
- Family problems and drugs interfered.
- No permanent address so couldn't register. I don't have a home. I need a parent's consent and transportation.
- Money.

#### Factor IV - *Low Perception of Need*

- I don't have a problem - it's just reading and writing and I can do everything else.
- Money is more important than education/I can teach myself what I need to know until you get to certificates.
- It wasn't a problem - I could read what I need.
- Rather get a job than go to school and get no credits.
- Teenage peer culture - school wasn't important.
- Mainly motivation wasn't there.
- School isn't enough Re the real world - there should be more co-op, working is more valuable.

#### Factor V - *Psychosocial Barriers*

- Felt embarrassed she couldn't read.
- Would return to high school where pace more appropriate, but feels too old.
- Embarrassed about difficulties.
- Too old for high school.
- I feel different from everyone else when I'm in classes.
- Over age from regular.

#### Factor VI - *Perceived Effort Beyond Class*

- Distance
- Would lose time with family members.
- Transportation, baby-sitting, supplies provided at Help Centre. "I wouldn't have been able to go without the baby-sitting."
- Needed \$50.00 to sign up for Wheable.

#### 1) *Planning to return*

- Planning to take correspondence courses. Has some trouble with comprehension but can spell and sound out words. "Don't ask me to tell you what they all mean." re LWR List 4.
- Plans to return to school after the baby. Registered for correspondence - hasn't started yet.
- Going back to school.
- I didn't like school, but now I need to go back. Have investigated going back to an adult learning centre. School was boring. Problems at home contributed. At times felt I wasn't getting enough explanation from teachers.
- Looking into alternative schooling.

## *2) Legitimize Volunteer Laubach- type programs*

- Would like to get a credit for his involvement in ABL program. Like one-to-one tutoring.
- Doesn't feel comfortable in group setting, one-to-one better.
- Would like to meet in group here at the TDMSC.

## *3) School experience negative but not expressed as Dislike of School, e.g. isolated and alone in classroom.*

- Self-esteem - felt judged in school and centered out.
- Kids bugged him because he was German.
- Teased by other kids because he is German.
- Language difficulties - doesn't understand in classes.
- School was not challenging enough because it was destreamed; I had problems and was kept out of school.
- Teachers don't care or are boring.
- I have problems with math, science, and history subjects.

## *4) Other*

- "My children might have taught me to read."
- Nobody ever tried to teach me to read and write.
- If he knew then what he knows now, he would have made more of an effort - peer pressure influences.
- Easier to leave school as an adult if frustrated.
- Had to overcome anger about being kept in home schooling; had wasted time and dropped out of home schooling. Parents kept her at home to keep her from bad influences.
- Was involved in math, English, computer upgrading, but quit just recently. ABE not challenging enough - but LWR low.
- No one encouraged him to go until father pushed him into it (signed him up for ABL).
- In jail, no one was making me go to school. Kicked out of school system in London, Centre for Lifelong Learning. Dyslexia - avoided reading,
- No school will take me because of violent behavior.