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Psychosocial Maturity in 4-H and Non 4-H Youth

Robert Leon Young
Utah State University

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PSYCHOSOCIAL MATURITY IN 4-H AND NON 4-H YOUTH

by

Robert Leon Young

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

Family and Human Development

Approved:

Major Professor

Committee Member

Committee Member

Dean of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

1981
THE 4-H PLEDGE

I pledge:
My head to clearer thinking,
My heart to greater loyalty,
My hands to larger service,
My health to better living,
For my club, my community, my country,
and my world.
ACKNOWLEDGEMENTS

I would like to thank Dr. Gerald Adams for the excellent guidance he has given me as my major professor. My appreciation is also extended to both Dr. Glen Jenson and Dr. Gerald Olson for their guidance, assistance and resources in helping me to formulate and complete this study.

Very special thanks are due Dr. J. Clark Ballard, whose support provided financial and other resources without which an evaluation of this extent would not have been possible. Acknowledgements also go to Dr. Brent Miller for his helpful comments, and to Jane Probst, and Cindy Esplin for the many hours they spent coding data. Also special thanks go to Anne Fillmore for her assistance in typing the manuscript.

Finally I express appreciation and love to my wife Debbie for the sacrifices she has made to support my work, and for her encouragement, insight and assistance. The persistence and achievement she exhibits in her many endeavors are a continual source of inspiration to me.

Robert Leon Young
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ABSTRACT

Psychosocial Maturity in 4-H and Non 4-H Youth

by

Robert Leon Young, Master of Science
Utah State University, 1981

Major Professor: Dr. Gerald R. Adams
Department: Family and Human Development

This study was undertaken to add to the knowledge of the psychosocial effects of the 4-H program upon its members. The objectives were to determine if 4-H involvement is associated with the psychological and social maturation of adolescent members, and to investigate how several variables such as age, urban/rural residence, and S.E.S. may help explain this relationship or lack of relationship.

To accomplish these objectives 165 youths (103 4-H, 62 non 4-H) and one parent of each youth, responded to mail-out questionnaires, answering questions of biographical content, and items from the Psychosocial Maturity inventory. Responses were compiled and analyzed by the use of several statistical summary techniques. The author considers the following findings to be of the greatest theoretical significance.

Discriminant analysis showed 4-Hers to be different from non 4-Hers in regard to parental reports of their Interpersonal and Social Adequacy. Correlational analyses supported the notion that 4-H involvement may
indeed lead to increased Social Adequacy, but showed that although Inter-
personal Adequacy was higher in 4-Hers than non 4-Hers, this advantage
is apparently not solely due to 4-H program effects.
INTRODUCTION

In less than 70 years a small movement to educate rural youngsters about agriculture and home economic sciences has grown into a colossal organization that effects the lives of over five million youths annually. Administrators of the program express that its central mission is to help young people become self-directing, productive, and contributing members of society (Extension Committee on Organization and Policy [hereafter referred to as ECOP], 1980). What elements of the program are designed to bring this objective into fruition? Evaluators are only beginning to find answers to such questions.

According to some 4-H program goals outlined by ECOP, one of the ways in which the program seeks to benefit youth is by helping them to "acquire positive attitudes toward self, and a feeling of self worth" (ECOP, 1980, p. 3). This Study looks at potential psychosocial effects that the 4-H program has upon the adolescents it serves by contrasting its members to youth who are not involved in the program.
LITERATURE REVIEW:

HISTORICAL AND PHILOSOPHICAL TRENDS IN 4-H EVALUATION

Cooperative Extension and 4-H: Surfacing Out of a Cultural Situation

Although the formal creation of the Cooperative Extension Program occurred through the passage of Congressional acts and bills, its beginnings were formed through an emerging mood of the American people (Kelsey & Hearne, 1949). Grass root need for a practical "taking the college to the people" became the impetus for Extension Programs to emerge.

The 4-H program (a component of Cooperative Extension) began in a similar way. Reck (1957) states that youth organizations of various types were becoming increasingly common late in the 19th century, particularly nature-type clubs. Recognizing this interest in youth across the country, Seaman Knapp (a pioneer in providing a prototype of Extension) began organizing youth clubs as part of his Extension work. With the passage of the Smith-Lever Act in 1914 4-H became officially a national organization, part of the Extension program. At that time a director of youth programs was called to Washington and the name, motto, and plan of organization were adopted. Within one year there were 4-H clubs in 47 states (Kelsey & Hearne, 1949).

Being associated with early Extension efforts, 4-H clubs were originally involved with agricultural and home economic pursuits. While county agents demonstrated University-developed improvements to the home life of a community's adults, they also guided youth in home and farm projects.
Culturally speaking, the 4-H program had other roots which are worthy of mention. First it should be pointed out that childhood and adolescence have only in the last few centuries come into being. That is, only with the dawn of the scientific age have we become culturally aware that children and adolescents are something more than miniature adults. Several sources declare this historical perspective (Aries, 1962; deMause, 1974; Hill, 1973) stating that most of the qualitative distinctions that we currently use to set children apart from adults were generally unknown prior to the sixteenth century. In fact, most have not been explored until the last half-century.

According to deMause in the *History of Childhood* (1974) parent-child relations historically have been devastating to children. Only gradually has society moved from acceptance of widespread infanticide and abandonment of children in the dark ages to the current norm of tolerant, supportive, and democratic home environments.

This is important to our discussion of 4-H origins because it helps to portray the status of the 4-H child/adolescent at the time the program was formed. Today 4-Hers range from age 9-19 (most members being between the ages of 10 and 12). Local involvement trends suggest that the average age has decreased slightly over the years.

Parents of this age group viewed child rearing differently in the past than we do today. But by the 1800's parents did begin to take internal factors into account in childrearing. Rather than trying to "conquer the child's spirit" they were starting to view parenting more as a psychological socialization (though their techniques were often questionable).

While the concept of childhood does not appear in history until
around the 13th century, the concept of adolescence had a much later advent. Aristotle and Rosseau (1762) originally discussed the notion of youth and adolescence, but the actual concept of adolescence was "invented" in the late 1800's. Probably the most prominent person in the popularization of the concept was the psychologist G. Stanley Hall. Recognized by many as the "father of adolescence" he initiated a child study movement early in his career at Clark University, and then later published a monumental two volume work on adolescence. He was apparently the first to consider this life stage as an important period, characterized by major development changes. Obviously influenced by Darwinian thought, he taught that through educational experiences, young people could learn to internalize prosocial character traits that could in turn, be genetically transferred to their offspring (Hall, 1969).

The zeitgeist was right for Hall, and for the popularization of adolescence. Adams and Gullotta (text in preparation) in a recent chapter on the history of adolescence, and also Hill (1979) explain why. Social and economic conditions in the 19th and early 20th centuries were instrumental in the invention of adolescence. Technological and scientific improvements in the 1800's which led to western industrialization played a central role. As many families moved from the farm to the city, and as employment conditions eventually led to the enactment of child labor laws, youth who were once valuable assets in agrarian settings became removed from the employment world. Compulsory education laws extended this removal and in short, adolescents became a unique, and new subset of individuals in society.

Emerging from an era characterized by a strong work ethic and victorian morals, it is not surprising that at the century's turn adults
began to express a "how are we going to keep the young people off the streets" mentality. Youth programs such as YMCA, BSA, and 4-H were answers to parental concerns. They welcomed programs which would help their children make "wise use of leisure time."

If we analyze the formation of the 4-H program from a social anthropological view we see that it is a patristic organization which was formed out of a patristic culture. This type of culture emphasizes achievement, individual responsibility, instrumental competence and success (Distler, 1968). This is contrasted to a matristic culture which emphasizes expressiveness rather than instrumentality, and which values emotional components of life instead of rational ones. U.S. culture in 1914 was almost exclusively patristic oriented. 4-H's old ties to higher education, the federal government, and private sponsors made it (4-H) definitely so. However, Mead (1980) and others (Distler, 1968; Adams and Looft, 1977) theorize that a gradual cultural evolution from patristic to matristic orientation is in process. There are indications that such a shift of orientation is likewise occurring in 4-H too. Originally 4-H was organized primarily by male adults, successful in agriculture, politics, business, and education. The founders' objectives were to guide youth through adult-generated programs into potentially more successful and productive lives. Had the program been of a matristic nature it would emphasize feeling, experiencing, and expressing rather than success, competition and educational achievement. Leadership would be peer-to-peer rather than adult-to-youth, and program direction would be as much youth-decided as adult-determined.
4-H Evaluation: Major Perspectives

The cooperative Extension has for years observed the importance of evaluation of programs. Lecturers in summer schools were airing the topic at least as early as 1945 (Kelsey & Hearne, 1949). It is possible that 4-H evaluation began this early, but the oldest study the author has uncovered only dates back to 1952 (see Brown & Boyle, 1964). 4-H evaluations have taken many forms over the years and have generally evolved to fit ever-changing needs. There is more interest in 4-H evaluation now than ever before.

Economic Catalysts

In 1977 Congress mandated the Cooperative Extension Service to provide evidence of the "economic and social consequences" of its programs. This mandate has been responsible for initiating a great deal of literature in Extension Evaluation (USDA report, 1980; Scriven, 1979; Stormer, Sappington, & Pelham, 1979). This current effort appears to be connected with a growing national political movement toward increased concern about accountability and evaluation. The National 4-H Development Committee on 4-H Program Evaluation and Accountability (1976) explains that

Accountability and evaluation are currently receiving increased attention at all levels of government and in many organizations, businesses and agencies. This increased attention results from insufficient money to finance expanding needs. In essence, those who provide funds are requiring evidence on how time, talents, money, and other resources have been invested and what results have been obtained (p.1).

4-H is no exception, and in fact may be feeling more concern about producing "evidences of consequences" than other Extension programs.
This is illustrated in the 1980 USDA evaluation report where it was pointed out that 4-H lacks an adequate research base, and lacks contact with faculty in social science disciplines. These deficiencies place it in a disadvantaged position in comparison to other Extension programs that are more firmly grounded in research.

It should be explained that although much 4-H evaluation research has been conducted on various levels of scientific merit, a scan of professional journals indicate that few if any of these studies are available to educational researchers for either critical review or general utilization. Literature is available from state and federal offices, but there appears to be no central resource center for distribution of 4-H evaluation materials. It becomes the task of the serious researcher to contact all state offices to locate the best and most recent studies in this area of interest.

The literature that is available must be skeptically reviewed as it has seldom been scrutinized by an editorial process. Much of it consists of intra-program evaluation, in most cases it remains descriptive, and seldom can inferences be generalized from the sample. However, directions of theoretical significance are being delineated and they help in the construction of a framework in which to couch this study.

**Four Types of Evaluation**

Four types of research are contained in the current evaluation literature. Basically they are responses to major program concerns. The study of structure and process of the organization is a response to expansion of the program and its administration. Research that
describes program participants and the extent of their involvement looks at the need to understand the types of people 4-H serves, and how the program can serve all types of youth in the United States. Assessments of educational effectiveness and delivery modes respond to the challenge of discovering which of the many new methods and materials which have been developed in education, are most successful in program settings. Finally, research that measures psychosocial outcomes recognizes that social and psychological research findings need to be related to 4-H work. Each of the four types will now be individually discussed.

The Study of Structure and Process

In just over 65 years 4-H membership has grown to over 5 million adolescent members. The staff (both paid and non-paid) exceeds 580,000. Naturally, the development of such a sizable organization has required evaluation of administrative processes, lines of responsibility, direction of programs, financial transactions, and sources of funding (USDA 1980 report). This type of research is essential to the maintenance of organizational effectiveness, and to scrutinize the distribution of resources. Although it is highly valuable for accountability purposes, and for keeping the program moving toward its goals, this research does not provide any information about the people 4-H serves—youth.

Studies that Describe 4-H Population and Extent of Involvement

4-H initially served only rural youth. In later years as the program spread to urban areas, it became obvious to administrators that urban and rural youth often have differing needs and interests. In 1959 the Extension Committee on Organization and Policy (ECOP) formally outlined 4-H's responsibility "to develop programs and projects that meet
the needs and interests of young people, regardless of the place of residence" (Brown & Boyle, 1964, preface). In response to the formally recognized need several research projects were undertaken, including a classic study by Brown and Boyle (1964). Collecting extensive data in several urban centers they assessed attitudes about the 4-H program held by club members, staff members and volunteers, community leaders, and even non 4-H youth. They generated a profile of the typical urban 4-Her and stated many implications for urban program development from their findings.

Another impressive study is Dennis and Hurt's (1979) *Youth in America: a Social Indicators Chartbook on the 4-H Eligible Population*. Comparing national statistics on youth to those of a national 4-H survey they report not only population trends, but reflect dimensions of importance of understanding personal characteristics, and activity levels of youth members. This study gives a demographic view of the program and describes 4-H youth in large social units, yet does not begin to ask, "What kinds of things does a 4-H program actually do (or not do) for young people?"

**Assessments of Educational Effectiveness and Delivery Modes**

As 4-H has extended its outreach, it has incorporated a wide variety of educational techniques, and increasing amounts and varieties of curriculum and media. Not only have researchers begun to evaluate effectiveness of teachers, and their use of these developments, but studies also look at the limitations and benefits of delivery modes which appear to be most appealing to certain age groups.

Most of 4-H programming is educational and therefore supplemental
to formal schooling. This type of research asks what makes 4-H education different from school experiences? What educational dynamics make it uniquely beneficial to members?

This category of evaluation is focusing more on outcome variables than the previous two categories. It is concerned with changes in the children/adolescents which are brought about by the program. Long term transfer of practical information has long been a major objective of 4-H. This educational-type research is also useful for accountability purposes. It produces assessment indices of impact, and helps programmers make more accurate decisions about financial cost versus educational effectiveness. One limitation it does have, nonetheless, is that it is not concerned with outcomes of a social or psychological nature, e.g., interpersonal communication, self-esteem, or community orientation.

Psychosocial Outcome Evaluation

The final form of evaluation research is concerned with the measurement of general personal and interpersonal maturity, and social adjustment of 4-H youth. It was explained earlier in this review that social, economic and technological developments precipitated the "invention" of childhood and adolescence in our society (Hill, 1979; Adams and Gullotta, text in preparation). Social Science, in its primitive stages at the time of Hall, has gradually begun to describe the stages of human development and corresponding characteristic behavior. Though only in our recent past, Hollingshead's 1949 study of 735 adolescents and Havinghurst, Bowman, Liddle, Matthews and Pierce's Growing up in River City (1962) are considered empirical studies in the area of adolescence. Research in late childhood or
preadolescence is even more recent.

As research discovers additional pieces to the puzzle of understanding human behavior, new constructs and paradigms have become tools to explain human social phenomena. In fact, a new vocabulary of terms has come into being to label psychological and social constructs. For example, concepts like self-esteem, identity development and socioeconomic status have all been invented since 4-H was organized.

4-H program objectives show a remarkable change that has occurred in administrative thinking over the years, which reflects the growing cultural awareness of social science progress (Appendix A). Where in 1940 virtually none of the program objectives demonstrated psychosocial content, over half of it's current goals do today. There can be no doubt that positive psychosocial outcomes in 4-H members are of primary importance in contemporary 4-H program goals.

This final type of evaluation seeks to find what program dynamics bring about desired psychosocial outcomes in 4-H youth. While a few ground-breaking studies are currently available to guide future research and evaluation efforts, by-and-large, a program evaluator has little previous research to guide his or her efforts.

For example, in 1971, Rutledge studied attitude change in disadvantaged 4-H youth as measured by "anomie" and I-E scales that correlated 4-H involvement with positive attitudinal increases. Another study (Marks, 1971) documented significantly decreased discrepancies between self-concept, and ideal self scores in 4-H'ers between the onset of a 4-H camp experience, and at the conclusion of the camp--after some ten weeks had expired since the initiation of the camp experience. Subaima (1961) surveyed ninth grade boys and girls (4-H and non 4-H),
giving them a modified form of the "California Test of Personality". Components included: sense of personal worth, feeling of belonging, social standards, social skills, and community relations. An interest inventory was also administered. There were no significant differences between the 4-H, and non 4-H boys and girls in social qualities, emotional stability, or interest patterns.

A very recent report of 4-H research conducted in Wisconsin (Steele & Rossing, 1981) includes results of telephone surveys wherein 4-Hers and parents of 4-Hers were asked their perceptions of potential benefits of the program in regard to their own involvement (or in the case of the parents, the involvement of their children). Items for the survey were created to be direct assessments of program goals outlined in "4-H in Century III". The results indicated that in several areas the 4-Hers appeared to be benefitting from 4-H in certain psychosocial ways such as interpersonal communication, and in the development of positive attitudes towards self.

Of the many studies of psychosocial content surveyed by the author, only the study conducted by Subaima (1961) controlled extraneous variables by use of a control group, and made a noticeable attempt to establish content validity with the instrument used. Thus, much of the available evaluation research currently available in document form should be viewed as offering only limited prototype direction.

Statement of Problem

The history and evolution of the 4-H program has been briefly illustrated and the author has pointed out cultural precedents and influences of the program. It was noted that over time an interest in
evaluation has emerged, and has intensified in recent years. Changes in 4-H thrusts toward concern about psychosocial development of youth appear to coincide with developments in the social science field, and have been recognized as being important to study by 4-H evaluators. However, the meager body of psychosocial outcome research that has been done in 4-H is limited in quantity and quality. More studies need to be conducted that seek to assess psychosocial impact of the 4-H program on the 4-Her and his or her family. Specifically, researchers need to ascertain if 4-H involvement does or does not benefit youths' psychosocial development, and what aspects of the program are beneficial or detrimental.

Care must be taken to control for extraneous variables in this research. 4-Hers need to be compared with control groups of non 4-Hers. Age is a variable that has likely confounded past results. Positive gains reported on many evaluation projects that measure increases in psychosocial reports over time, may be due to simple maturation that all youths undergo as they age. Also, attempts need to be made to isolate response items from attributions of effect. A negative illustration of this is, when 4-H personnel administrate questionnaires to youth and ask them if the program has contributed to their psychosocial adjustment; an implication has been made that 4-H is likely a contributor. Attributions may thus be generated by "experimenter effects".

Finally, sex differences need to be examined. Few studies have considered that boys and girls who generally participate in different 4-H emphases and activities, probably are affected differently by their 4-H experiences. In what ways does 4-H treat boys and girls differently? Do the sexes have differing needs that should be addressed by program
planners? These are questions that need to be explored.

**General Objectives of This Outcome Evaluation**

"Outcome Evaluation" generally focuses on the assessment of the extent to which a program has brought about its desired objectives of goals. Naturally research cannot "prove" a program's effect upon people's lives, but valid and reliable studies can support premises about relationships between variables and infer the direction of those relationships.

The goals we bring into consideration are those 4-H objectives referred to as psychosocial in nature. (See Appendix A) When these goals are considered as a unit they state a main direction of the 4-H program: helping youths to become psychologically and socially adjusted. This study is an attempt to add to the "psychosocial outcomes of 4-H evaluation" literature. Specifically the investigation focuses on 4-H program involvement's relationship to adolescents' psychological and social maturation. Operationally speaking, the hypothesis reads:

\[ H_0 = \text{Involvement in 4-H clubs (involvement versus non-involvement)} \]

is not significantly related to scores on the Individual, Interpersonal Social Adequacy subscales of the Psychosocial Maturity Inventory.

An attempt is also made to investigate how variables such as age, urban/rural residence, and socio-economic status (S.E.S.) may help explain the dynamics of how involvement in 4-H is negatively or positively related to psychosocial maturity.
METHOD

Subjects

4-H and non 4-H youth were selected from state 4-H rosters and school rosters respectively. Approximately the same number of 4-H and non 4-H names were obtained for youths in nine different counties. Both youths in the program, and those uninvolved, came from the same schools in the individual counties. A stratified random selection technique was used to obtain twelve approximately equal-size groups from each research site. Groups were differentiated by 4-H/non 4-H, male/female, and by age (12, 13, 14). Of the 360 youths selected to participate, 165 (46%) filled out a questionnaire that was mailed to them, and returned it to the experimenter. One parent of each youth respondent also filled out a companion questionnaire. Tables 1 and 2, and figures 1 and 2, portray characteristics of the sample.

Instrumentation

In looking for a scale to assess the broad scope of this study, it became quickly obvious that few comprehensive indices or inventories were useful. Most available instruments were found to be personality measures created for clinical use, and in most cases asking for responses to negative, anti-social type questions. One scale, however, the Psychosocial Maturity inventory (PSM) by Greenberger, McConochie, and Josselson (1974) appeared appropriate for the needs of this evaluation study.

Theoretically the PSM measures three dimensions of youth behaviors
Table 1
Percent of 4H, and Non-4H Youths in Three Age Groups

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<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. \( \bar{x} \) Age of 4H youth = 13.1 years,
\( \bar{x} \) Age of non-4H youth = 13.2 years.
<table>
<thead>
<tr>
<th>Religion</th>
<th>4H</th>
<th>Non-4H</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDS</td>
<td>96.1</td>
<td>85.0</td>
</tr>
<tr>
<td>Catholic</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Protestant</td>
<td>--</td>
<td>1.7</td>
</tr>
<tr>
<td>Other</td>
<td>2.9</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 1. Urban/rural residence of 4-H and non 4-H youth.
Figure 2. Socio-economic status of 4-H and non 4-H respondents
($\overline{x}$ S.E.S. of 4-Hers = 3.4, $\overline{x}$ S.E.S. of non 4-Hers = 3.6).
that are required of mature individuals in our (American) society. Greenberger et al. (1974) describes them as:

...the capacity to function on one's own (Individual Adequacy); the capacity to interact adequately with others (Interpersonal adequacy); and the capacity to contribute to social cohesion (Social Adequacy). (p.2)

These three types of adequacy constitute the subscales of the inventory. Since it is a tool developed to assess social program impact on youth, it is particularly well suited for a 4-H program evaluation.

The PSM scale has been validated by Greenberger et al. (1974) and Josselson, Greenberger, and McConochie (1974). The items are predictive of measures of self-esteem, and are negatively related to anxiety in youths. Social Adequacy scores are positively associated with adolescents' participation in social projects, such as tutoring inner-city youngsters. Also, teachers nominations of children who are high on PSM related traits are significantly associated with childrens' PSM scores (Greenberger et al., 1974). Finally, the scale has been factor analyzed for internal consistency of the subscales. Overall, the inventory appears to be a reliable and consistent measure.

In addition to using items selected from the PSM, several personal data items were included on the questionnaire. These items are listed in appendix. They include an index for length and amount of involvement in 4-H, family involvement in the program, age of youth and parent, sex of youth and parent, socio-economic status (S.E.S.), family size, urban/rural residence, relationships with adults, number of friends, etc. These items serve to screen out and identify mediating or intervening variables. For example, should the data analysis show a relationship between 4-H involvement and increased PSM scores, the relationship may be due to higher socio-economic status of 4-H youth. Multivariate
analyses serve to more specifically delineate dynamics of the effects of involvement in 4-H.

**Procedure**

The experimenter traveled to, or called, schools in Salt Lake, Utah, Weber, Box Elder, Cache, Sevier, Duchesne, Wayne and Tooele Counties in the State of Utah to obtain names, addresses, and phone numbers of non 4-H youths. Matching biographical data for 4-H youth were available from state 4-H rosters. By the process described in the "subjects" section, approximately twenty-five 4-H, and twenty-five non 4-Hers from each county were selected as participants. Two questionnaires were mailed to each respondent, one for the youth and one for a parent of the youth. County 4-H youth agents signed statements of support of the research project which were enclosed in the packets. Three days following the mail-out of the survey, reminder cards were sent to the participants. Three weeks later a thank-you "prompt" card was sent to all nonrespondents. Prior to the final count, the experimenter contacted 47 of the nonrespondents by phone to ascertain reasons for nonresponse. All 47 excused themselves because they lacked the time, or had lost or misplaced the questionnaire, or because they had never received one. About one fifth of those contacted by phone eventually did complete their questionnaires.

Participants mailed back the surveys via pre-addressed, stamped envelopes to their local youth agents who forwarded them to the experimenter. Privacy of the respondents was assured by removal of names from the questionnaires, which retained a number code.

Data from the surveys were coded onto computer sheets, punched onto
cards, and then transformed to a computer storage file for convenient analysis.

Reliability of Coding

A reliability check on the coding of the questionnaires was obtained as follows. Twenty-four questionnaires were randomly drawn from the coded sample. Responses on the questionnaires were then double-checked against how they were coded on the computer sheet. Two measures of reliability were then calculated. The first compared the number of items miscoded to the total number of items coded. Using this calculation, the coded data were found to be 99.7% correct in representing the hard data on the questionnaires. The second measure was determined by comparing the number of questionnaires with at least one flaw, with the total number of questionnaires checked. In this case 87.5% of the questionnaires were coded flawlessly.

Protection of Subjects' Rights

This study had no potential to cause physical or psychological harm to the subjects. However, participants showed by written consent their willingness to participate, and their understanding that they were not required to participate, and that they could at any time discontinue their involvement. They were informed that there would be no risks, but that they may receive benefit from the questionnaire by gaining insight into the scientific process.

To insure the protection of the subjects, a proposal of this study was reviewed, and passed by the Internal Review Board of Utah State University.
RESULTS

The primary objectives of this evaluation study were (a) to assess the potential effects of 4-H involvement on psychological and social adjustment of adolescents, and (b) to explore possible program factors which contribute to positive development.

Program Effects on Psychosocial Maturity

Discriminant function analysis was used to assess the predictive relationship between 4-H and non 4-H involvement and psychosocial maturity. Discriminant analysis, as a multivariate procedure, produces a basic discriminant function of interrelated variables which statistically differentiate between criterion groups (4-H versus non 4-H involvement). A stepwise procedure was used to first identify the best single discriminant variable (using Wilks Lambda), followed by the identification of any remaining variables which improved the discriminating function based on the first and strongest discriminating variable.

Two discriminant function analyses were performed using either the parents' or the youths' reports on the PSM. Only the parental reports provided a significant function on these analyses. As summarized in Table 3 for the parental reports of their child's PSM attitudes, 4-H youths were judged to be significantly more interpersonally and socially adequate. These data provide support for the assumption that, at least in the perceptions of parents, 4-H youths are viewed as more mature than adolescents not involved in the program.

Since parent reports, but not youth reports, lead to a significant
Table 3

Discriminant Function, Means and Standard Deviations Between Participation in 4H, and PSM Scores: Parental Report

<table>
<thead>
<tr>
<th>PSM Scores</th>
<th>Standard Discriminant Function Coefficient</th>
<th>4H</th>
<th>Non-4H</th>
<th>Wilks Lambda</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Adequacy</td>
<td></td>
<td>55.15</td>
<td>6.3</td>
<td>55.22</td>
<td>7.6</td>
</tr>
<tr>
<td>Social Adequacy</td>
<td></td>
<td>44.31</td>
<td>5.8</td>
<td>46.71</td>
<td>6.4</td>
</tr>
<tr>
<td>Group Centroid</td>
<td></td>
<td>-.28</td>
<td></td>
<td>.13</td>
<td></td>
</tr>
</tbody>
</table>

Note. Eigenvalue = .037; relative percent of variance - 100.0; canonical correlation .19; percent of cases correctly classified - 57.6%.
program comparison difference in this study, the next logical step was to assess the correlational relationship between the groups on the PSM measures. As reviewed in Table 4, parental and youth scores on the PSM total and subscale measures were generally significantly correlated in the positive direction. Surprisingly, the correlations in most cases were only modest; thus, parental perceptions were significantly, but only moderately related to youths' perceptions of themselves on the measures.

Assessment of Medialional Factors

Analysis of Variance. Given the possibility of several factors interacting in determining PSM behavior, a series of analyses of variance were computed to examine possible interactions. First, using a Sex x Age, x Experimental Group factorial, analyses of variance were computed on both the youth and parental PSM scores. No significant interactions were observed between the three factors in this evaluation study. However, a significant main effect for age was observed on the Interpersonal Adequacy subscale. As outlined in Table 5, a significant linear relationship was observed between Interpersonal Adequacy and age of youth for the total sample. That is, younger adolescents scored lower, and older adolescents higher on the Interpersonal Adequacy subscale. No parallel main effect was observed for either Individual Adequacy, Social Adequacy, or total PSM scores.

Using a Sex x Rural/Urban x Experimental Group factorial, additional analyses of variance were computed on the PSM scores. No significant main or interaction effects were observed on youths' reports. However, for parental reports two significant findings were observed. As shown in Table 6, there was a marginally significant main effect for population
Table 4

Correlation Between Youth And Parent Scores On The PSM Subscales

<table>
<thead>
<tr>
<th>PSM Subscales (Youth)</th>
<th>PSM Subscales (Parent)</th>
<th>Total PSM</th>
<th>Individual Adequacy</th>
<th>Interpersonal Adequacy</th>
<th>Social Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PSM</td>
<td></td>
<td>.50***</td>
<td>.18**</td>
<td>.35***</td>
<td>.52***</td>
</tr>
<tr>
<td>Individual Adequacy</td>
<td></td>
<td>.33***</td>
<td>.47***</td>
<td>.09</td>
<td>.23**</td>
</tr>
<tr>
<td>Interpersonal Adequacy</td>
<td></td>
<td>.39***</td>
<td>.00</td>
<td>.36***</td>
<td>.42***</td>
</tr>
<tr>
<td>Social Adequacy</td>
<td></td>
<td>.44***</td>
<td>.07</td>
<td>.30***</td>
<td>.52***</td>
</tr>
</tbody>
</table>

Note. * p < .05
      ** p < .01
      *** p < .001
Table 5
Mean Age Comparison On Youth Reports Of Interpersonal Adequacy

<table>
<thead>
<tr>
<th>Age Comparisons</th>
<th>12 yrs.</th>
<th>13 yrs.</th>
<th>14 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50.2</td>
<td>53.4</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Note. F(2,148) = 5.71, p < .004.
Table 6
Mean Comparisons Between Rural/Urban Residence of All Respondents on Parent Reports of Individual Adequacy

<table>
<thead>
<tr>
<th>Population size</th>
<th>Less than 2,000</th>
<th>2,000-5,000</th>
<th>5,000-20,000</th>
<th>Over 20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34.42</td>
<td>32.68</td>
<td>35.50</td>
<td>35.80</td>
</tr>
</tbody>
</table>

Note. $f(3, 144) = 2.48, p < .06.$
size. As one proceeds from rural to urban settings parents report higher Individual Adequacy scores for their youths. Further, a significant three-way interaction was observed on the Social Adequacy measure, $F(3, 144) = 2.80, p = .04$. Figure 3 illustrates that contrasting effects are apparent for male and female youths depending upon rural/urban residence and 4-H versus non 4-H involvement. The most dramatic effects for males appear when one contrasts rural residence to living in a large city.

Involvement in 4-H in a rural area appears to be positively related to Social Adequacy. However, involvement in 4-H in the city appears to have a negative effect. Conversely, non 4-H involvement in a rural area is associated with low Social Adequacy perception by parents, while noninvolvement in a city is associated with high Social Adequacy perceptions. For females, the interaction effect is somewhat different. In a highly rural setting, 4-H involvement is associated with lower Social Adequacy when compared with non 4-H youths. Further, living in a more urbanized setting is associated with lower Social Adequacy when compared with non 4-H youths. Further, living in a more urbanized setting is associated with higher social adequacy scores for 4-H versus non 4-H female adolescents.

Correlational Data. Since an age effect was observed in one of the earlier ANOVA computations, further comparisons of potential age effects were undertaken. As reported in Table 7, the zero-order correlation between age of 4-H youths and PSM scores reported by parents and youths indicate that age is a significant variable in this program evaluation. That is, at least for youths reports, age is associated with self-perceptions of psychosocial maturity. When all youths are considered, age comparisons using correlational analyses indicate that age is negatively
Figure 3. Illustration of the interaction between sex, urban/rural, and the involvement/non-involvement dimensions' effect on Social Adequacy scores. (Level A: Population <2,000. Level B: Population is from 2,000-5,000. Level C: Population is from 5,000-20,000. Level D: Population > 20,000.)
<table>
<thead>
<tr>
<th>Group</th>
<th>Total PSM</th>
<th>Individual Adequacy</th>
<th>Interpersonal Adequacy</th>
<th>Social Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Youth</td>
<td>.04</td>
<td>-.19*</td>
<td>.21*</td>
<td>.00</td>
</tr>
<tr>
<td>Female</td>
<td>.07</td>
<td>-.12</td>
<td>.23*</td>
<td>.01</td>
</tr>
<tr>
<td>Male</td>
<td>.01</td>
<td>-.30*</td>
<td>.21</td>
<td>.02</td>
</tr>
<tr>
<td>All Parents</td>
<td>.08</td>
<td>-.08</td>
<td>.20</td>
<td>.07</td>
</tr>
<tr>
<td>Parents of Females</td>
<td>.03</td>
<td>-.07</td>
<td>.18</td>
<td>.02</td>
</tr>
<tr>
<td>Parents of Males</td>
<td>.15</td>
<td>-.09</td>
<td>.15</td>
<td>.17</td>
</tr>
</tbody>
</table>

Note. *p < .05.
correlated with self-perceptions of individual adequacy while being positively related to Interpersonal Adequacy skills. Further analyses controlling for sex, indicate that the negative relationship between age and individual adequacy exists for male adolescents only. Further, the positive relationship between Interpersonal Adequacy and age is found only in the female sample.

Two independent variables used to assess effects of the 4-H program on PSM scores were: Number of years in 4-H and Number of 4-H activities in which the youth had been involved. Tables 8 and 9 provide one assessment of the correlational relationship between these two indices and PSM scores reported by parents and youths. Given age has been shown to be an important variable in this study, age was partialed out to provide an unconfounded examination of years of involvement and number of activities' effects upon PSM development. As Table 6 demonstrates, number of activities in 4-H has a positive and enhancing relationship with PSM reports on parental perceptions. However, no such findings were observed for years in 4-H. Only one significant correlation was observed on the youths' report. For females, total number of years in 4-H was positively associated with self-perceptions of Individual Adequacy.

Regression Analyses. Finally, on an exploratory basis, a series of multiple stepwise regression statistics were computed to assess the influence of program factors upon PSM reports. These analyses offer further information about important 4-H program dimensions on psychosocial maturity of adolescents.

As shown in Table 10, the factors that explain the variance in
Table 8
Partial Correlations\(^a\) Between Two 4H Youth Involvement Indices and PSM Scores of Parents of 4H Youth

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Total PSM</th>
<th>Individual Adequacy</th>
<th>Interpersonal Adequacy</th>
<th>Social Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years in 4H</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Parents</td>
<td>.04</td>
<td>.02</td>
<td>-.07</td>
<td>.15</td>
</tr>
<tr>
<td>Parents of Females</td>
<td>.03</td>
<td>.02</td>
<td>-.07</td>
<td>.13</td>
</tr>
<tr>
<td>Parents of Males</td>
<td>.10</td>
<td>-.02</td>
<td>-.01</td>
<td>.22</td>
</tr>
<tr>
<td>Number of 4H Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Parents</td>
<td>.24**</td>
<td>.23**</td>
<td>.07</td>
<td>.31***</td>
</tr>
<tr>
<td>Parents of Females</td>
<td>.27*</td>
<td>.28**</td>
<td>.05</td>
<td>.33**</td>
</tr>
<tr>
<td>Parents of Males</td>
<td>.24</td>
<td>.06</td>
<td>.16</td>
<td>.31*</td>
</tr>
</tbody>
</table>

Note. \(^a\)The effect of age is partialled out of the correlations.

\* \( p < .05 \)
\** \( p < .01 \)
\*** \( p < .001 \)
Table 9
Partial Correlations\(^2\) Between Two Involvement Indices and PSM Scores of 4H Youths

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Total PSM</th>
<th>Individual Adequacy</th>
<th>Interpersonal Adequacy</th>
<th>Social Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years in 4H</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Youth</td>
<td>.05</td>
<td>.12</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Females</td>
<td>.04</td>
<td>.20*</td>
<td>-.07</td>
<td>.04</td>
</tr>
<tr>
<td>Males</td>
<td>.10</td>
<td>-.02</td>
<td>.13</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Number of 4H Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Youth</td>
<td>.11</td>
<td>.15</td>
<td>-.03</td>
<td>.14</td>
</tr>
<tr>
<td>Females</td>
<td>.13</td>
<td>.18</td>
<td>-.03</td>
<td>.16</td>
</tr>
<tr>
<td>Males</td>
<td>.07</td>
<td>.06</td>
<td>-.07</td>
<td>.14</td>
</tr>
</tbody>
</table>

Note. a The effect of age is partialed out of the correlations.

* P < .05.
Table 10

Summary of Stepwise Forward Regression of Selected Variables\(^a\) on Total PSM Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Step</th>
<th>Variables Selected</th>
<th>Beta of Variable</th>
<th>F Value of Model</th>
<th>R Square of Model</th>
<th>Degrees of Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>4H youth</td>
<td>1</td>
<td>Close friends</td>
<td>.16</td>
<td>3.30</td>
<td>.03</td>
<td>1, 93</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Rural/urban</td>
<td>.20</td>
<td>3.41</td>
<td>.07</td>
<td>2, 92</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Family activities (4H)</td>
<td>.17</td>
<td>3.26*</td>
<td>.10</td>
<td>3, 91</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Youth regard for 4H</td>
<td>.10</td>
<td>2.67*</td>
<td>.11</td>
<td>4, 90</td>
</tr>
<tr>
<td>Parents of 4H youth</td>
<td>1</td>
<td>Leader effectiveness</td>
<td>.54</td>
<td>9.85**</td>
<td>.10</td>
<td>1, 93</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Close friends</td>
<td>.16</td>
<td>9.05**</td>
<td>.17</td>
<td>2, 92</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Parent regard for 4H</td>
<td>.24</td>
<td>7.68**</td>
<td>.21</td>
<td>3, 91</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Leader-youth rel.</td>
<td>-.28</td>
<td>6.71**</td>
<td>.23</td>
<td>4, 90</td>
</tr>
<tr>
<td>Non-4H youth</td>
<td>1</td>
<td>Close friends</td>
<td>.23</td>
<td>1.90</td>
<td>.03</td>
<td>1, 59</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Rural/urban</td>
<td>.22</td>
<td>2.00</td>
<td>.06</td>
<td>2, 58</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Youth regard for 4H</td>
<td>.17</td>
<td>2.00</td>
<td>.10</td>
<td>3, 57</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Other clubs</td>
<td>.12</td>
<td>1.71</td>
<td>.11</td>
<td>4, 56</td>
</tr>
<tr>
<td>Parents of non-4H youth</td>
<td>1</td>
<td>S.E.S.</td>
<td>.38</td>
<td>8.76**</td>
<td>.13</td>
<td>1, 59</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Youth regard for 4H</td>
<td>.18</td>
<td>5.94**</td>
<td>.17</td>
<td>2, 58</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Parent regard for 4H</td>
<td>-.18</td>
<td>4.60**</td>
<td>.20</td>
<td>3, 57</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Other clubs</td>
<td>.16</td>
<td>3.92**</td>
<td>.22</td>
<td>4, 56</td>
</tr>
</tbody>
</table>

Note. \(^{a}\)The stepwise procedure included limiting the number of variables selected to four.

\(^*\)p < .05.
\(^{**}\)p < .01.
Total PSM scores of 4-H youth, are Number of close friends, and Rural/Urban residence; whereas, their parents report Effectiveness of the 4-H leader, and Number of close friends to be factors that most closely correlate with Total PSM scores. The parental correlations appear to be more clear, and to explain a great deal more about the relationships of these variables, as is shown by the greater significance of the F values and R square values of the parent correlations. Viewing parent and youth responses together, it seems that the greater number of close friends 4-H youths have, the more adequate they perceive themselves, and are perceived by their parents.

These results take on more meaning as we examine the regressions of the independent variables upon the PSM subscores. Individual adequacy as reported by the youth (Table 11) is most adequately predicted by the youths' regard for the 4-H program, the second and third variables selected were Rural/Urban residence and Number of Activities in 4-H. Belonging to other clubs is negatively associated with Individual Adequacy. The more clubs the 4-Her belongs to, the less individually adequate are his or her scores.

Parental reports here again differ from youth reports. Whereas the variable foremost related to individual adequacy for youth, was Youth regard for 4-H, parents reported Leader Effectiveness (again) as the best predictor. The Number of youth activities in 4-H was also significantly correlated, as were Leader-Youth relationship and Parent regard for 4-H. Interestingly, the correlation between Individual Adequacy and Leader-Youth relationship was negative; whereas, Leader Effectiveness' relationship to Individual Adequacy was positive. This twist is evident in the parent reports of total PSM scores, and is
### Table II

Summary of Stepwise Forward Regression of Selected Variables\(^a\)

on Individual Adequacy Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Step</th>
<th>Variables Selected</th>
<th>Beta of Variable</th>
<th>F Value of Model</th>
<th>R Square of Model</th>
<th>Degrees of Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>4H Youth</td>
<td>1</td>
<td>Youth regard for 4H</td>
<td>.29</td>
<td>10.86**</td>
<td>.10</td>
<td>1, 93</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Rural/urban</td>
<td>.16</td>
<td>6.63**</td>
<td>.13</td>
<td>2, 92</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Youth activities (4H)</td>
<td>.16</td>
<td>5.29**</td>
<td>.15</td>
<td>3, 91</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Other clubs</td>
<td>-.10</td>
<td>4.21**</td>
<td>.18</td>
<td>4, 90</td>
</tr>
<tr>
<td>Parents of 4H</td>
<td>1</td>
<td>Leader effectiveness</td>
<td>.52</td>
<td>8.98**</td>
<td>.09</td>
<td>1, 93</td>
</tr>
<tr>
<td>Youth</td>
<td>2</td>
<td>Youth activities (4H)</td>
<td>.21</td>
<td>7.39**</td>
<td>.14</td>
<td>2, 92</td>
</tr>
<tr>
<td></td>
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<td>Leader-youth rel.</td>
<td>-.29</td>
<td>5.96**</td>
<td>.17</td>
<td>3, 91</td>
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<td>4</td>
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<td>.16</td>
<td>5.18**</td>
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<tr>
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<td>4.42*</td>
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<td>-.16</td>
<td>3.39*</td>
<td>.15</td>
<td>3, 57</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Rel. with adults</td>
<td>.14</td>
<td>2.85*</td>
<td>.17</td>
<td>4, 56</td>
</tr>
<tr>
<td>Parents of Non-4H Youth</td>
<td>1</td>
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<td>.47</td>
<td>11.63**</td>
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<td>13.27**</td>
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<tr>
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<td>.15</td>
<td>9.23**</td>
<td>.33</td>
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<tr>
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<td>Close friends</td>
<td>-.11</td>
<td>7.16**</td>
<td>.34</td>
<td>4, 56</td>
</tr>
</tbody>
</table>

Note. \(^a\)The stepwise procedure included limiting the number of variables selected to four.

\(^*\)P < .05.

\(^{**}\)P < .01.
also evident in the negative correlation exhibited between youths' Interpersonal Adequacy scores and their reports of Leader-Youth relationship. It appears that where the leader's effectiveness may positively affect the youth, close relationships between Leader and youth may be detrimental.

Table 12 shows that no variables serve as strong predictors of Interpersonal Adequacy in parent or youth reports. In either case, after four variables were included in the selection process only 11% of the variance was explained. Looking at youths' reports, the Leader-youth relationship negatively correlates with the subscale measure, whereas, number of close friends is the top predictor in parental reports.

In regard to the regression with the Social Adequacy (Table 13) subscores, parent reports were more consistent and significant. They pinpointed Youth regard for 4-H, Belonging to other clubs, Number of close friends, and Leader effectiveness to be the strongest predictors of Social Adequacy (in that order). On the other hand, 4-H youths found close friends, Number of Activities in 4-H, Rural/Urban residence, and Belonging to other clubs to be more significantly related.
Table 12
Summary of Stepwise Forward Regression of Selected Variables\textsuperscript{a} on Interpersonal Adequacy Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Step</th>
<th>Variables Selected</th>
<th>Beta of Variable</th>
<th>F Value of Model</th>
<th>R Square of Model</th>
<th>Degrees of Freedom</th>
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<tbody>
<tr>
<td>4-H youth</td>
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<td>3.46*</td>
<td>.07</td>
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<td></td>
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<td>Rural/urban</td>
<td>.17</td>
<td>3.09*</td>
<td>.09</td>
<td>3, 91</td>
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<td>Family activities 4-H</td>
<td>.15</td>
<td>2.88*</td>
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<td>Close friends</td>
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<tr>
<td></td>
<td>2</td>
<td>Other clubs</td>
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<td>3.10</td>
<td>.06</td>
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<tr>
<td></td>
<td>3</td>
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<td>3.30*</td>
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<td>2.80*</td>
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<td>Rel. with adults</td>
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<td>1.55</td>
<td>.08</td>
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<td>.14</td>
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</tr>
</tbody>
</table>

Note. \textsuperscript{a}The stepwise procedure included limiting the number of variables selected to four.

\* \( p < .05 \).

\** \( p < .01 \).
Table 13

Summary of Stepwise Forward Regression of Selected Variables\(^a\)
on Social Adequacy Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Step</th>
<th>Variables Selected</th>
<th>Beta of Variable</th>
<th>F Value of Model</th>
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<tr>
<td></td>
<td>2</td>
<td>Youth activities 4H</td>
<td>.13</td>
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<td></td>
<td>4</td>
<td>Other clubs</td>
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<td></td>
<td>3</td>
<td>Close friends</td>
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<td>6.61**</td>
<td>.18</td>
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</tr>
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<td></td>
<td>4</td>
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<td>Non 4-H youth</td>
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<td></td>
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<td>4.03*</td>
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<td>.14</td>
<td>4, 56</td>
</tr>
</tbody>
</table>

Note. \(^a\)The stepwise procedure included limiting the number of variables selected to four.

\[ ^* \ p < .05. \]
\[ ^{**} \ p < .01. \]
DISCUSSION

A major finding of the study is found in the results of the discriminant function analysis. Parental reports of the youths' PSM subscores demonstrated 4-H youths to be higher in Interpersonal Adequacy (the capacity to interact with others) and Social Adequacy (the capacity to contribute to social cohesion) than non 4-H members. These data are consistent with those reported by Steele and Rossing (1981) where parents and youths attributed development in (a) interpersonal skills such as communication and (b) increased concern about community and public affairs, to 4-H involvement.

The fact that the analysis did not differentiate between 4-Hers and non 4-Hers on the Individual Adequacy sub-scale is also important. This means that 4-Hers' feelings about themselves (self esteem, locus of control) were apparently not more positive than those of non 4-Hers. This result is consistent with Subaima’s (1961) comparison of 4-H and non 4-Hers wherein he found no differences between the groups on emotional stability scores; but, this result conflicts with Steele and Rossing (1981) who report increased positive attitudes towards self due to 4-H involvement. Conflicting research reports are not surprising when one considers that different measures and methods were used by the different investigators. Certainly it would be helpful if future research were devoted to duplication of procedures over research sites and across investigations.

It must be remembered that the discriminant function analyses, and the other analyses used in this study do not describe causal relation-
ships. That is, it is not known if 4-H involvement brought about increased PSM scores, if high PSM scores influenced youths to join 4-H, or if the two variables appear related because of some other reason.

It is not unlikely that gregarious (interpersonally adequate) youths may join 4-H for the social opportunities it creates. Less outgoing youths may also avoid such clubs for fear of interaction. There doesn't seem to be a reason why socially adequate youths (with a greater capacity to contribute to civic and social cohesion) would more likely belong to 4-H, unless the program were making contributions toward such social attitudes.

It has been shown that these data indicate a possible function: that 4-H contributes to youths' interpersonal and social adequacy. But the correlation data gathered, alter this perspective.

When one examines the partial correlations in Table 6, in the context of the discriminant function results, it becomes clear that although 4-Hers were shown to differ from non 4-Hers on both Interpersonal, and Social Adequacy subscales in the discriminant function analysis, this difference appears to be due to involvement in 4-H in the case of Social Adequacy only. Whereas Number of 4-H activities correlated with Social Adequacy; neither involvement index correlated significantly with Interpersonal Adequacy. One surmises that these data more strongly evidence that the tendency for 4-Hers to score higher on Social Adequacy was due to involvement in 4-H activities. On the other hand, it demonstrates that unless an unknown variable is causing a "spurious zero relationship" between Interpersonal Adequacy and the involvement indices, it must be assumed that the differences found between 4-Hers and non 4-Hers on the subscale must be due to something other than 4-H
involvement. Maybe 4-H clubs actually do attract more interpersonally adequate youths. This hypothesis is supported by the fact that on the stepwise regression analysis, no variable (or group of variables) was found to be an adequate predictor of interpersonal adequacy.

The stepwise regression analysis did produce significant results in connection with social adequacy. Since youth regard for 4-H was the first variable selected, it seems 4-H youth who view the program most highly are those who also are the most socially adequate. Belonging to other clubs, having close friends, and having a 4-H leader who is perceived as effective, all account for variance unexplained in the initial correlation.

Perhaps a gestalt-type hypothesis may be most adequate in explaining this result. High socially adequate 4-Hers appreciate the program for what it provides in terms of social opportunities. These youth who belong to a greater than average number of clubs, who have more close friends than the average adolescent, and who have participated in a lot of 4-H activities (being guided by an effective leader) have, through the modeling and teaching of their leader, and through extended interaction with others, incorporated a greater than average concern for community and public affairs, and a tolerance and understanding of people different from themselves.

In the discriminant analysis, and in many of the other analyses performed, it is interesting that parent reports differed so greatly from youth reports. Parents filled out a questionnaire identical to the youths', following explicit directions to answer each question as their child would. The differences between parent and youth reports constrain us to ask if the parents know their youths more, or less
keenly than the youths know themselves. Developmental literature suggests that young adolescents, egocentric, overly body-conscious, reliant on their peers for social validation, and not yet capable of formal operational thought, are yet unable to conceptually view themselves accurately, at least as accurately as they could if they were adults. These considerations taken into account, the parental reports were viewed with more weight by the researcher.

The differences between parent and youth data raise questions about the data reported by Steele and Rossing (1981). Youth reports from one sample should only very cautiously be compared with parent reports.

In regard to the Sex x Rural/urban x Experimental group ANOVA, the marginally significant main effect of Rural/urban residence on individual adequacy may partly be due to the rural youths' relative isolation. Having less opportunity to interact with other youths, they may feel a greater need for social validation. It is probable that they are given more chores and responsibilities around home which may make them feel more controlled by their parents. In fact, the Individual Adequacy subscale contains questions that tap the youths' orientation toward work. Since rural youths are not only likely to be required to work more than urban adolescents, but to engage in more difficult and unpleasant types of work, their responses on work orientation items may be negatively weighted.

The results of the analyses of variance also raise questions in connection with the PSM measure. The main effect of age upon Interpersonal Adequacy wasn't surprising, but was expected to also affect the Individual Adequacy and Social Adequacy subscales. All three subscales have been found to be positively associated with age in other samples.
(Greenberger et al., 1974) of youth grades age five through eleven. In this sample, no significant correlations were found between age and Social Adequacy; and Individual Adequacy, surprisingly, was negatively correlated with age! It appears that by working with a sample with an age range smaller than those analyzed by Greenberger et al. (1974), age twelve to fourteen, some interesting dynamics have emerged, particularly when the age-with-PSM correlations are controlled by sex.

In this condition, the negative relationship between age and Interpersonal Adequacy is accounted for largely by male reports. This finding is consistent with the adolescent studies of Jones and Bayley (1950) and Sorenson (1973) which explain that the developmental changes of early adolescence and puberty (or late-puberty) may be felt more keenly by males. It is also consistent with studies by Simmons, Rosenberg, and Rosenberg (1973), which show a developmental negative trend in self-concept between the ages of eleven and fourteen for boys and girls. The positive relationship between age and Interpersonal Adequacy which was found to be largely explained by female data, is consistent with studies reported by Macoby and Jacklin (1974), that describe female adolescents to be more affiliative than males.

Sex differences emerged again in the partial correlations of parent reports. When age was partialled out of the correlations between PSM scores and indices of involvement, parents of females reported greater and more significant correlations than did parents of males.
SUMMARY AND CONCLUSIONS

The present study was undertaken to add to the knowledge of the psychosocial effects of the 4-H program upon its youth members. The objectives of the study were to determine if 4-H involvement is associated with the psychological and social maturation of adolescent members, and to investigate how several variables such as age, urban/rural residence, and S.E.S. may help explain this relationship or lack of relationship.

Any conclusions reached in this study must be considered in light of research design and statistical inference limitations. This study was both descriptive and inferential in nature. However, because the sample was drawn from a conservative population (the State of Utah), with a high concentration of persons of a singular religious preference, and because there was a low response rate to the mail-out-questionnaire, some caution should be exercised in generalizing these results to all American youths.

To accomplish the above objectives, 165 youths (103 4-H, 62 non 4-H) and one parent of each youth, responded to mail-out questionnaires. Responses were compiled and analyzed by the use of several statistical summary techniques. The author considers the following finding to be the most significant.

Discriminant analysis showed 4-Hers to be different from non 4-Hers in regard to parental reports of their interpersonal and social adequacy. Correlational analyses supported the notion that 4-H involvement may indeed lead to increased social adequacy, but showed that although Interpersonal Adequacy may be higher in 4-Hers than non 4-Hers,
this advantage is apparently not solely due to 4-H effects.

Further research that would be useful, would be that which duplicates this study using a larger sample, and a more reliable sampling technique. Also, a greater number of involvement indices could be used to assess potential differing effects of types of involvement, such as club versus nonclub. In addition, a subscale that assesses different types of achievement would be very useful for further comparisons. Finally, the optimal study would incorporate a longitudinal design, and methods that measure intrapersonal change over time.
REFERENCES

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Extension Committee on Organization and Policy. 4-H in century III. East Lansing: Michigan State University, 1980.


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### Appendix A

Comparison of 4-H Goals in 1940 and 1980

<table>
<thead>
<tr>
<th>1940</th>
<th>1980</th>
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</thead>
<tbody>
<tr>
<td><strong>Cooperation-Interpersonal Competence</strong></td>
<td><strong>Cooperation-Interpersonal Competence</strong></td>
</tr>
<tr>
<td>1. TO TRAIN rural boys and girls in cooperative action to the end that they may increase their accomplishments and, through associated efforts, better assist in solving rural problems.</td>
<td>1. Develop effective interpersonal relationships with adults and other youth.**</td>
</tr>
<tr>
<td><strong>Concept of Community</strong></td>
<td></td>
</tr>
<tr>
<td>2. TO HELP rural boys and girls to develop desirable ideals and standards for farming, homemaking, community life, and citizenship, and a sense of responsibility for their attainments.</td>
<td>2. Develop concern for involvement in community and public affairs.+</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
</tr>
<tr>
<td>3. TO DEVELOP in rural boys and girls habits of healthful living, to provide them with information and direction in the intelligent use of leisure, and to arouse in them worthy ambitions and a desire to continue to learn, in order that they may live fuller and richer lives.</td>
<td>3. Develop abilities to perform as productive, contributing citizens.+</td>
</tr>
<tr>
<td>5. Maintain optimum physical and mental health.</td>
<td>4. Increase Leadership capabilities.</td>
</tr>
<tr>
<td>6. Use time wisely in attaining a balance in life (work, leisure, family, community and self). **</td>
<td></td>
</tr>
<tr>
<td><strong>Education - Instrumental Competence</strong></td>
<td></td>
</tr>
<tr>
<td>4. TO PROVIDE rural boys and girls an opportunity to &quot;learn by doing&quot; through instruction certain farm or home enterprises and demonstrating to others what they have learned.</td>
<td>7. Develop their potential by seeking and acquiring educational and vocational experiences.</td>
</tr>
<tr>
<td>5. TO AFFORD rural boys and girls technical instruction in farming and homemaking, that they may acquire skill and understanding in these fields and a clearer vision of agriculture as a basic industry, and of homemaking as a worthy occupation.</td>
<td>8. Learn practical skills, develop competencies and acquire knowledge.</td>
</tr>
<tr>
<td>9. Develop inquiring minds, an eagerness to learn and the ability to apply science and technology.+</td>
<td></td>
</tr>
</tbody>
</table>
6. TO TEACH and to demonstrate to rural boys and girls methods designed to improve practices in agriculture and homemaking, to the end that farm incomes may be increased, standards of living improved, and the satisfactions of farm life enhanced.

Problem Solving

7. TO TEACH rural boys and girls the value of research, and to develop in them a scientific attitude toward the problems of the farm and the home.

10. Strengthen abilities to make intelligent decisions, solve problems and manage their own affairs in a fast-changing world.+

Other Psychosocial Goals

11. Acquire positive attitudes toward self and a feeling of self-worth.**

12. Improve skills in communication and self-expression.**

13. Develop socially acceptable behavior, personal standards and values for living.+

Ecological Awareness

8. TO INSTILL in the minds of rural boys and girls an intelligent understanding and an appreciation of nature and of the environment in which they live.

Objectives were taken from 4-H in Century III (ECOP 1980 publication) and Wilson, F.E., Growth of 4-H Clubs, 19-0.
Appendix B

The Psychosocial Maturity Model*

Individual Adequacy

Self-Reliaance
- absence of excessive need for social validation
- sense of control
- initiative

Work Orientation
- general work skills
- standards of competence
- pleasure in work

Identity
- clarity of self-concept
- consideration of life goals
- self-esteem
- internalized values

Interpersonal Adequacy

Communication Skills
- ability to encode messages
- ability to decode messages
- empathy

Enlightened Trust
- rational dependence
- rejection of simplistic views of human nature
- awareness of constraints on trustworthiness

Knowledge of Major Roles
- role-appropriate behavior
- management of role conflict

Social Adequacy

Social Commitment
- feelings of community
- willingness to modify personal goals in favor of social goals
- readiness to form alliances
- interest in long-term social goals

Tolerance of Individual and Cultural Differences
- willingness to interact with people who differ from the norm
- sensitivity to the rights of people who differ from the norm
- awareness of costs and benefits of tolerance

*This model of Psychosocial maturity is taken from Greenberger et al. (1974) p. 33.
Appendix C

Items From the PSM Inventory Used in the Study

Self Reliance
1. I feel very uncomfortable if I disagree with what my friends think.
2. Luck decides most things that happen to me.
3. The main reason I'm not more successful is that I have bad luck.
4. The future is so uncertain, you can't really make any plans.
5. In a group I prefer to let other people make the decisions.

Work Orientation
6. I find it hard to stick to anything that takes a long time to do.
7. I believe in working only as hard as I have to.
8. I am a hard worker.
9. I leave my homework unfinished if there are a lot of good TV shows on that evening.
10. I tend to be a somewhat lazy person.

Identity
11. I feel I'm becoming more and more like the sort of person that I want to be.
12. I change the way I feel and act so often that I sometimes wonder who the 'real' me is.
13. Most people are better liked than I am.
14. I often wish I were someone else.
15. I don't treat other people the way I feel I should.

Communication Skills
16. I find it hard to speak my thoughts clearly.
17. I am good at explaining what I think or believe.
18. I often forget to listen to what others are saying.
19. I usually know what the teacher wants me to do.
20. I usually understand exactly what people want from me.
Enlightened Trust

21. If people are picked in a fair way to be on a trial jury, they are sure to reach a fair decision.
22. If a man in government isn't honest, he won't get elected more than once.
23. You can be sure people will be honest with you if you are honest with them.
24. Even though it's hard to do, TV and newspapers give us the true facts about important events.
25. If a person is on trial in court, the decision will be fair no matter what kind of family he comes from.

Knowledge of Major Roles

26. Your friends should be willing to lend you anything you want.
27. If you see a coat you think you might like to buy, the salesperson should agree to save it for as long as it takes to decide.
28. A judge should be allowed to judge a friend of his in court if he feels he can be fair.
29. A good teacher should be willing to give you extra help whether or not you've done your work.
30. If an adult has a serious problem, he would be better off talking to a close friend than to a stranger who is trained to help people with problems.

Social Commitment

31. I would want to pay taxes to run schools even if I did not have children.
32. I would not mind if they used some of my tax money to repair highways, even if I didn't have a car.
33. A job worth something that others will enjoy if you won't be able to enjoy it too.
34. I would agree to a good plan to make a better life for the poor, even if it cost me money.
35. I often think about doing things so that people in the future can have things better.
Tolerance of Individual and Cultural Differences

36. I would rather not live in a neighborhood where there are people of different races or skin color.

37. People of different races or skin color should get together at parties and dances.

38. I feel a little sorry for people whose ideas about God are different from mine.

39. People from unusual backgrounds, like Chinese-Americans, should have a chance to get elected to top government jobs.

40. There are a lot of useful things for the rest of us to learn from having a group of foreign-born people in our neighborhood.
Appendix D

Personal Data Items

1. Age of youth 11, 12, 13, 14, 15. (circle one)
2. Sex of youth M, F (circle one)
3. Age of parent ______
4. Sex of parent M, F (circle one)
5. Occupation of father ____________________________
6. Occupation of mother ____________________________
7. Marital status of natural parents (circle one)
   a. married to each other    d. parent deceased
   b. divorced from each other e. other
   c. separated but not divorced
8. Youth is the ______ child in the family (please circle) 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th or more.
9. How many children in the family? ______
10. Family religious orientations _______________________
11. Which of the following best describes where you live? (circle one)
    a. single dwelling in an outlying area, or town smaller than 2,000 people.
    b. in a town with 2,000-5,000 people
    c. in a small city with 5,000-20,000 people
    d. in a large city over 20,000 people
12. What approximately is your total family income yearly?
    a. $7,000 or less
    b. $8,000-$13,000
    c. $13,000-$20,000
    d. $20,000 or more
14. How many real close friends do you have? (these are people whom you would spend time with each week on a regular basis) 1, 2, 3, 4, 5 or more.
15. List the clubs or other organizations that you belong to at school or in the community. For example, a pep club, an athletic team or church youth group. (If none, leave blank)
   1. ___________ 2. ___________ 3. ___________ 4. ___________
16. Have you ever been picked up by a Law Enforcement officer for breaking the law?  
   a. yes  b. no  (if yes, for what offense? ____________________________)

17. How many adults (people over 18 years old) do you spend meaningful, and enjoyable time with each week? (just you and the adult together). Please write in the spaces provided what their relationship is to you, for example: uncle, neighbor, grandmother, etc.
   1. ________  2. ________  3. ________  4. ________

Section Four

Instructions: This last section is only for those who have been involved in 4-H. Parents of youth who have had some experience in 4-H should answer these questions the way they feel their child would answer them. Non 4-H parents may skip this final section.

18. From one to five how would you rate the effectiveness of your most recent 4-H Leader?
   1 ________  2 ________  3 ________  4 ________  5 ________
   (very poor at working with kids my age)  (very good at working with kids my age)

19. From one to five how would you describe your most recent leader?
   1 ________  2 ________  3 ________  4 ________  5 ________
   (a person who works with youth but doesn’t like it very much)  (neutral)
   (a close friend who has helped me learn, and grow as a person)

20. How much longer do you plan to stay in 4-H? ________ years.

21. How many years have you been in 4-H?

22. If you could change one thing about 4-H what would it be? __________________________

23. What do you like most about 4-H? __________________________

__________________________
Please list the 4-H activities that members of your immediate family have participated in (as leaders or members) and mark on the graph which members were (or are) involved in which activities.

<table>
<thead>
<tr>
<th></th>
<th>Horsemanship</th>
<th>Foods Club</th>
<th>Summer Camp</th>
<th>State Fair</th>
<th>Others (Please list)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
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<tr>
<td>Mother</td>
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<tr>
<td>Youth surveyed</td>
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</tbody>
</table>

List: brothers as (b) and sisters as (s)
Appendix E

Parent Questionnaire

Directions

1. On the next page is a consent statement that must be signed by you if you participate.

2. On the following pages are four short sections of questions. Instructions are given for each section. Please follow the instructions carefully.

3. If your child needs help understanding a question, please be careful not to bias his/her answers. Please do not compare answers.

4. When finished, double check to make sure all questions have been answered.

5. Please return both questionnaires and the consent statement via the enclosed, stamped, envelope.

Thank you for your cooperation
To comply with government regulations this statement must be read and signed by parents who participate in the survey:

**CONSENT STATEMENT**

The attached survey is designed to measure individual perceptions of social interests, behaviors and attitudes. We are asking the custodial parent to participate in this project, and to likewise give permission for their child to complete a survey which is very similar to the one directed to the parent. This investigation is concerned with the study of 4-H (or non-4-H) involvement and it's implications to self-perceptions. This study is a straight-forward survey with no risk or deception involved. Your participation is voluntary and will in no way have an undesirable consequence on your involvement (or lack of involvement) in 4-H activities. All responses will be kept confidential.* We ask your permission to contact you at a later date to reassess your viewpoints. It is your right to indicate that you agree to participate this time, but not again in the future. Likewise, if you wish not to participate at this time you have the right to decline our invitation. But your perceptions are very important to us and we hope you can see your way to complete and return the enclosed questionnaires. The primary benefit of this project is in the utilization of survey information to determine if 4-H versus non-4-H involvement is associated with important self-perception effects.

I agree to participate and have my child participate in this project. The completed questionnaires are enclosed with this statement.

______________________________
Signature of parent

I agree [ ] or decline [ ] the invitation to participate in a possible follow-up survey.

______________________________
Signature of parent

Please print:

Parent's name ________________________________

Name of youth ______________________________

*As soon as we get this survey back, we will detach this page so that the questionnaires will be anonymous. Please don't put your names on any other page but this one.
Section One: Biographical Information

Directions: Circle the best answer, or fill in the blank.

1. Age of youth 11, 12, 13, 14, 15. (circle one)

2. Sex of youth M, F (circle one)

3. Age of parent

4. Sex of parent M, F

5. Occupation of father

6. Occupation of mother

7. Marital status of natural parents (circle one)
   a. married to each other
   b. divorced from each other
   c. separated but not divorced
   d. parent deceased
   e. other

8. Youth is the ____ child in the family (please circle) 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th or more.

9. How many children in the family? 

10. Family religious orientations

11. Which of the following best describes where you live? (circle one)
   a. single dwelling in an outlying area, or town smaller than 2,000 people.
   b. In a town with 2,000-5,000 people
   c. In a small city with 5,000-20,000 people
   d. In a large city over 20,000 people

12. What approximately is your total family income yearly?
   a. $7,000 or less
   b. $8,000-$13,000
   c. $13,000-$20,000
   d. $20,000 or more

13. What county in Utah do you live in?
Section Two

Instructions: PARENTS SHOULD ANSWER THESE QUESTIONS THE WAY THEY FEEL THEIR YOUTH WOULD ANSWER THEM. (THIS IS IMPORTANT!) Circle the best answer or fill in the blank.

1. How many real close friends do you have? (These are people whom you would spend time with each week on a regular basis) 1, 2, 3, 4, 5 or more.

2. List the clubs or other organizations that you belong to at school or in the community. For example, a pep club, an athletic team or church youth group. (If none, leave blank) 1. 2. 3. 4. 

3. Have you ever been picked up by a Law Enforcement officer for breaking the law? a. yes  b. no (if yes, for what offense?) 

4. How many adults (people over 18 years old) do you spend meaningful, and enjoyable time with each week, (just you and the adult together). Please write in the spaces provided what their relationship is to you, for example: uncle, neighbor, grandmother, etc. 1. 2. 3. 4. 

5. From 1 to 5, how would you rate your regard for the 4-H program? (circle a number)

   1  2  3  4  5

very low regard  low regard  neutral  high regard  very high regard

(I think it's stupid)  (I think it's great)

6. From 1 to 5, how do you think your parents would rate their regard for 4-H programs? (circle a number)

   1  2  3  4  5

very low regard  low regard  neutral  high regard  very high regard

7. From 1 to 5, how do you think most of your classmates would rate their regard for 4-H? (circle a number)

   1  2  3  4  5

very low regard  low regard  neutral  high regard  very high regard

8. From 1 to 5, how do you think most people in your community would rate their regard for 4-H? (circle a number)

   1  2  3  4  5

very low regard  low regard  neutral  high regard  very high regard

9. How many of your close friends are involved or have been involved in 4-H? (circle best answer) 0, 1, 2, 3, 4, 5 or more.

10. Before this survey came in the mail had you ever heard of 4-H?
   a. yes  b. no
Section Three

INSTRUCTIONS:

This section is different. 40 statements are listed. After each statement you will see SD, D, N, A, SA. These letters stand for strongly disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA).

Here is a sample statement to show you how to mark your answers:

Sample statement

It is important to conserve energy. SD D N A SA

The person who answered this question circled A because they agreed with the sample statement. If they had strongly disagreed with the sample statement they would have circled SD.

If they did not agree, or disagree with the statement to some extent, they should have circled N, because their feeling was neutral.

Please read the following 40 statements. Circle either SD, D, N, A, SA to show how you feel about each statement.

PARENTS SHOULD ANSWER THESE QUESTIONS THE WAY THEY FEEL THEIR YOUTH WOULD ANSWER THEM

1. I would agree to a good plan to make a better life for the poor, even if it cost me money. SD D N A SA
2. I often think about doing things so that people in the future can have things better. SD D N A SA
3. I believe in working only as hard as I have to. SD D N A SA
4. I am a hard worker. SD D N A SA
5. I am good at explaining what I think or believe. SD D N A SA
6. I often forget to listen to what others are saying. SD D N A SA
7. If you see a coat you think you might like to buy, the sales person should agree to save it for as long as it takes to decide. SD D N A SA
8. A judge should be allowed to judge a friend of his in court if he feels he can be fair. SD D N A SA
9. People of different races or skin color should get together at parties and dances. SD D N A SA
10. I feel a little sorry for people whose ideas about God are different from mine. SD D N A SA

ARE YOU ANSWERING THESE QUESTIONS THE WAY YOU FEEL YOUR CHILD WOULD ANSWER THEM? (see directions)
11. I leave my homework unfinished if there are a lot of good TV shows on that evening.

12. I tend to be a somewhat lazy person.

13. I usually know what the teacher wants me to do.

14. I usually understand exactly what people want from me.

15. A good teacher should be willing to give you extra help whether or not you’ve done your work.

16. If an adult has a serious problem, he would be better off talking to a close friend than to a stranger who is trained to help people with problems.

17. People from unusual backgrounds, like Chinese-Americans, should have a chance to get elected to top government jobs.

18. There are a lot of useful things for the rest of us to learn from having a group of foreign-born people in our neighborhood.

19. You can be sure people will be honest with you if you are honest with them.

20. Why work for something that others will enjoy if you won’t be alive to enjoy it too?

21. I find it hard to speak my thoughts clearly.

22. Most people are better liked than I am.

23. I would rather not live in a neighborhood where there are people of different races or skin color.

24. The main reason I’m not more successful is that I have bad luck.

25. Your friends should be willing to lend you anything you want.

26. I find it hard to stick to anything that takes a long time to do.

27. If people are picked in a fair way to be on a trial jury, they are sure to reach a fair decision.

28. If a man in government isn’t honest, he won’t get elected more than once.

29. I feel very uncomfortable if I disagree with what my friends think.

30. Luck decides most things that happen to me.
31. I feel I'm becoming more and more like the sort of person that I want to be. SD D N A SA
32. I change the way I feel and act so often that I sometimes wonder who the "real" me is. SD D N A SA
33. I would want to pay taxes to run schools even if I did not have children. SD D N A SA
34. I would not mind if they used some of my tax money to repair highways, even if I didn't have a car. SD D N A SA
35. Even though it's hard to do, TV and newspapers give us the true facts about important events. SD D N A SA
36. If a person is on trial in court, the decision will be fair no matter what kind of family he comes from. SD D N A SA
37. I often wish I were someone else. SD D N A SA
38. I don't treat other people the way I feel I should. SD D N A SA
39. The future is so uncertain you can't really make any plans. SD D N A SA
40. In a group I prefer to let other people make the decisions. SD D N A SA

Section Four

Instructions: This last section is only for those who have been involved in 4-H. Parents of youth who have had some experience in 4-H should answer these questions the way they feel their child would answer them. Non-4-H parents may skip this final section.

1. From one to five how would you rate the effectiveness of your most recent 4-H Leader? 1 2 3 4 5
   (very poor at working with kids my age) (very good at working with kids my age)
2. From one to five how would you describe your most recent leader? 1 2 3 4 5
   (a person who works with youth but doesn't like it very much) (a close friend who has helped me learn, and grow as a person)
3. How much longer do you plan to stay in 4-H? _______ years.
4. How many years have you been in 4-H?
5. If you could change one thing about 4-H what would it be? ___________________
6. What do you like most about 4-H? ___________________
7. Please list the 4-H activities that members of your immediate family have participated in (as leaders or members) and mark on the graph which members were (or are) involved in which activities.

<table>
<thead>
<tr>
<th></th>
<th>Horsemanship</th>
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<td>Mother</td>
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<tr>
<td>Youth surveyed</td>
<td></td>
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</table>

List brothers as (b) and sisters as (s).
Appendix F

Youth Questionnaire

Directions

1. On the following pages are 3 sections of questions. Please follow the instructions for each section.

2. If you don't understand a question ask your parent, but don't ask them for answers.

3. There are no wrong answers, so don't worry about doing poorly—you can't. But it is still important that you answer each question honestly.

4. Be careful to answer every question unless you are instructed to do otherwise. When you are finished double check to make sure you haven't skipped any.

Thank you for your cooperation
Section One

Directions: Circle the best answer, or fill in the blank.

1. How many real close friends do you have? (These are people whom you would spend time with each week on a regular basis) 1, 2, 3, 4, 5 or more.

2. List the Clubs or other organizations that you belong to at school or in the community. For example, a pep club, an athletic team or church youth group. (if none, leave blank)

   1. ___________________________ 2. ___________________________ 3. ___________________________ 4. ___________________________

3. Have you ever been picked up by a Law Enforcement officer for breaking the law?  a. yes  b. no (if yes, for what offense? ________)

4. How many adults (people over 18 years old) do you spend meaningful, and enjoyable time with each week? (just you and the adult together). Please write in the spaces provided what their relationships is to you, for example: uncle, neighbor, grandmother, etc.

   1. ___________________________ 2. ___________________________ 3. ___________________________ 4. ___________________________

5. From 1 to 5, how would you rate your regard for the 4-H program? (circle a number)

   very low regard  low regard  neutral  high regard  very high regard— (I think it's stupid)
   1  2  3  4  5

6. From 1 to 5, how do you think your parents would rate their regard for 4-H programs? (circle a number)

   very low regard  low regard  neutral  high regard  very high regard
   1  2  3  4  5

7. From 1 to 5, how do you think most of your classmates would rate their regard for 4-H? (circle a number)

   very low regard  low regard  neutral  high regard  very high regard
   1  2  3  4  5

8. From 1 to 5, how do you think most people in your community would rate their regard for 4-H? (circle a number)

   very low regard  low regard  neutral  high regard  very high regard
   1  2  3  4  5

9. How many of your close friends are involved or have been involved in 4-H? (circle best answer) 0, 1, 2, 3, 4, 5 or more.

10. Before this survey came in the mail had you ever heard of 4-H?
   a. yes  b. no
Section Two

Instructions:

This section is different. 40 statements are listed. After each statement you will see SD, D, N, A, SA. These letters stand for STRONGLY DISAGREE (SD) NEUTRAL (N) AGREE (A) AND STRONGLY AGREE (SA).

Here is a sample statement to show you how to mark your answers.

Sample Statement

It is important to conserve energy.  

The person who answered this question circled A because they agreed with the sample statement. If they had strongly disagreed with the sample statement they should have circled SD.

If they did not agree, or disagree with the statement to some extent, they should have circled N, because their feeling was neutral. Please read the following 40 statements, circle either SD, D, N, A or SA to show how you feel about each statement.

1. I would agree to a good plan to make a better life for the poor, even if it cost me money.
2. I often think about doing things so that people in the future can have things better.
3. I believe in working only as hard as I have to
4. I am a hard worker
5. I am good at explaining what I think or believe
6. I often forget to listen to what others are saying
7. If you see a coat you think you might like to buy, the sales person should agree to save it for as long as it takes to decide.
8. A judge should be allowed to judge a friend of his in court if he feels he can be fair.
9. People of different races or skin color should get together at parties and dances.
10. I feel a little sorry for people whose ideas about God are different from mine.
11. I leave my homework unfinished if there are a lot of good TV shows on that evening.
12. I tend to be a somewhat lazy person.
13. I usually know what the teacher wants me to do.
14. I usually understand exactly what people want from me.
15. A good teacher should be willing to give you extra help whether or not you've done your work.
16. If an adult has a serious problem, he would be better off talking to a close friend than to a stranger who is trained to help people with problems.
17. People from unusual backgrounds, like Chinese-Americans, should have a chance to get elected to top government jobs.
18. There are a lot of useful things for the rest of us to learn from having a group of foreign-born people in our neighborhood.
19. You can be sure people will be honest with you if you are honest with them.
20. Why work for something that others will enjoy if you won't be alive to enjoy it too?
21. I find it hard to speak my thoughts clearly.
22. Most people are better liked than I am.
23. I would rather not live in a neighborhood where there are people of different races or skin color.
24. The main reason I'm not more successful is that I have bad luck.
25. Your friends should be willing to lend you anything you want.
26. I find it hard to stick to anything that takes a long time to do.
27. If people are picked in a fair way to be on a trial jury, they are sure to reach a fair decision.
28. If a man in government isn't honest, he won't get elected more than once.
29. I feel very uncomfortable if I disagree with what my friends think.
30. Luck decides most things that happen to me.
31. I feel I'm becoming more and more like the sort of person that I want to be.
32. I change the way I feel and act so often that I sometimes wonder who the "real" me is.  
33. I would want to pay taxes to run schools even if I did not have children.  
34. I would not mind if they used some of my tax money to repair highways, even if I didn't have a car.  
35. Even though it's hard to do, TV and newspapers give us the true facts about important events.  
36. If a person is on trial in court, the decision will be fair no matter what kind of family he comes from.  
37. I often wish I were someone else.  
38. I don't treat other people the way I feel I should.  
39. The future is so uncertain, you can't really make any plans.  
40. In a group I prefer to let other people make the decisions.  

Section Three

Directions:

This last section should only be filled out if you are, or have been a 4-Her. If you have never been involved in 4-H, skip this last section. If you have been in 4-H, or are now a member, please answer these last questions.

1. From one to five, how would you rate the effectiveness of your most recent 4-H Leader?  
   1 2 3 4 5  
   (very poor at working with kids my age) (very good at working with kids my age)

2. From one to five, how would you describe your most recent leader?  
   1 2 3 4 5  
   (a person who works with youth, but doesn't like it very much) (a close friend who has helped me learn, and grow as a person)

3. How much longer do you plan to stay in 4-H? _____ years.

4. How many years have you been in 4-H? _____ years

5. If you could change one thing about 4-H what would it be?  

6. What do you like most about 4-H?  

Dear Parent:

One of the major responsibilities of the Cooperative Extension Service here in the County is to sponsor a variety of youth programs under the auspices of 4-H. To help us understand the needs and the wants of young people of our county, we are conducting a survey of youth that have and have not been involved in 4-H type programs. We are looking to see what impact our programs have on the lives of young people.

We have randomly selected your family to participate in this study and hope that you will take time to help us in this worthy project. The questionnaires take approximately 25 minutes to fill out. We would appreciate it if you as a parent, or guardian would fill out one and the youth to whom this packet is addressed fill out the other without consulting each other in so doing. We would like you to follow the directions given on the questionnaire. Please try and fill out the questionnaire within the next two days and return it in the enclosed envelope.

We in the Extension Service feel a keen need to develop the kinds of programs that will help our youth grow into mature adults. It is persons like yourself that can greatly aid us in gaining the type of information we need to successfully evaluate whether or not the programs we offer are indeed doing the things we hope they will.

Sincerely yours,
Hello:

This is just a reminder to you we need your help by your participating in the 4-H, non 4-H youth study. If you have not done so already, please fill out the questionnaires mailed to you recently, and mail them back in the self-addressed envelope. It should take less than 25 minutes to complete. Please do it today.

Thank you for your assistance.

County Cooperative Extension
VITA

Robert Leon Young
Candidate for the Degree of
Master of Science

Thesis: Psychosocial Maturity in 4-H and Non 4-H Youth

Major Field: Family and Human Development

Biographical Information:

Personal Data: Born in Provo Utah on June 16, 1954; son of John R. Young, and June M. Young; Married Deborah Ann Young December 29, 1977; two children, Ryan Daryl (age 2), and Melynda Kaye (age 3 months).

Education: Attended elementary schools in Utah and Wyoming; Graduated from Rawlins High School, Rawlins Wyoming; received a Bachelor of Science degree from Utah State University in 1980, with a major in Psychology and a minor in Art; completed requirements for the Master of Science degree in Family and Human Development at Utah State University in 1981.