

SOCIAL-PSYCHOLOGICAL CORRELATES  
OF HETEROSEXUAL ORIENTATION  
AMONG FOURTH, FIFTH, AND  
SIXTH GRADE STUDENTS

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ABSTRACT

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By

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There has been much confusion concerning the course of heterosexual development in the preadolescent period. Some theorists think there is little interest in, or interaction with, the opposite sex until puberty while some speculate that, on the basis of recent empirical findings, much interest and interaction takes place before puberty. This study attempted to provide data on the incidences of certain heterosexual orientation items as well as on the correlates of heterosexual orientation in general. In addition an attempt was made to study the sequence of heterosexual development in preadolescence.

This study examined heterosexual orientation among 1,334 preadolescent students between the ages of eight and twelve in a western Michigan community. The sample represented over 90 percent of the preadolescent children enrolled in the public schools of that community. A 55

item forced-choice questionnaire was administered in March, 1973. A scale of heterosexual orientation was developed from the following items: kissing, necking, dating, going steady, asking for a date, having been asked for a date, and having had an opposite sex friend. Respondents were then grouped into high, medium, and low heterosexual orientation groups. Contingency tables were formed using the remaining items in the questionnaire by heterosexual orientation. The tables were analyzed by use of the chi square statistic.

It was found that the concept of "latency" is not applicable for these preadolescents. The majority of both the boys and girls had had an opposite sex friend, had been in love, and had kissed or been kissed by a member of the opposite sex. High heterosexual orientation was associated with such nonconforming behaviors as smoking, drug usage, alcohol consumption, theft, vandalism, fighting, and truancy. In addition, high heterosexual orientation was related to indicators of stress such as boredom, sadness, self-concern, and suicidal thought. In general, it was found that the child high in heterosexual orientation was less conventional--i.e., less controlled by parents and social institutions.

Guttman scales were devised to investigate the sequential development of heterosexual orientation. There was support for the following sequence: (1) having an opposite sex friend, (2) having been in love and having



kissed, (3) having gone steady and having necked, (4) having had a date. The research pointed out that much heterosexual orientation takes place before actual dating begins. It was suggested that preadolescent heterosexual orientation could be conceptualized as development on two continuums: the social-emotional involvement continuum and the physical involvement continuum.

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Thomas Charles Bergen

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## CHAPTER I

### INTRODUCTION

#### Overview and Importance of the Research Problem

Until very recently most theories of childhood and adolescence have maintained that the middle child, or preadolescent, had very little interest in the opposite sex. Sometimes what interest is conceded is described as aversion. This lack of interest is the main characteristic of what Freud had termed the "latency" period. The arrival of puberty is seen as bringing about a sudden interest in the opposite sex accompanied by rapidly diminishing antipathies.

In contrast to these ideas, several studies have shown that there often is a social and/or romantic interest in the opposite sex during this period (Lewis, 1958; Kanous, Dougherty, and Cohn, 1962; Reese, 1966; Broderick and Fowler, 1961). As early as 1902 Sandford Bell made similar observations. Studies of sexual behavior do not show the period of middle childhood as being asexual (Elias and Gebhard, 1969; Ramsey, 1943). This agrees with the

retrospective histories taken by Kinsey of adults (Kinsey, et al., 1949). Broderick (1970) has commented on how remarkable it is that the theories which claim that children in middle childhood have no interest in the opposite sex have survived as long as they have in the face of anthropological evidence and empirical studies. The present study will explore the heterosexual orientation, and associated correlates, of the preadolescent child. While there have been a number of studies dealing with actual sexual activity among preadolescent children such as sex play and masturbation, there is a relative lack of research on the heterosexual orientations that accompany these behaviors. It is felt that this represents a significant gap in the understanding of the preadolescent as well as heterosexual orientation in general.

#### A General Statement of the Research Problem

This study will examine the preadolescent heterosexual orientation among a sample of over thirteen hundred fourth, fifth, and sixth grade students from a western Michigan community that is basically white, nonmetropolitan, and in terms of socioeconomic level is primarily upper working class to upper middle class. A viable scale of heterosexual orientation will be constructed and the association of various social-psychological variables with scale scores will be examined. Specifically an attempt will be made to construct Guttman scales from items dealing

with heterosexual orientation to assure rigor in measurement. Probable sequential developmental paths involved in heterosexual orientation will be outlined. It is hoped that this study will help clear up some of the confusion that has existed concerning preadolescent heterosexuality. As a minimal contribution, this study will provide a comparative data base which can be used by professionals who are concerned with preadolescents.

## CHAPTER II

### THE RESEARCH PROBLEM IN PERSPECTIVE:

#### A REVIEW OF LITERATURE

##### Theoretical Perspectives

Interest in the development of heterosexual orientation has not been a major consideration of sociologists and psychologists. However some research on this topic goes back to the turn of the century. In 1902 the American psychologist Sanford Bell observed that what he called the emotion of "sex-love" appears in the pre-adolescence period rather than during adolescence as was more commonly thought to be the case (Bell, 1902).

Bell based this conclusion on eight hundred cases he personally observed as well as over seventeen hundred cases reported to him by his students. He proposed a five stage theory of sexual development. Of particular interest to this study are his first two stages. The first stage is from age three to eight and the second stage is from age eight to fourteen. Interest in the opposite sex is shown in the first stage by such things as kissing, hugging, jealousies, confessions to each other, giving of gifts,

etc. He cites a number of studies which show that physical contact is important. He does not feel that this contact is specifically sexual however:

The love demonstrations of children in the first stage of the emotion's development are generally spontaneous, profuse, and unrestrained. There is an absence of shyness, of any sense of shame, of the feeling of self-consciousness. The children have as yet no notion of the meaning of sex (Bell, 1902, p. 333).

During the second stage the children appear to be shy, modest and self-conscious. While many observers have taken these as indications of lack of interest in the opposite sex, Bell stated that love can often be detected if one looks for the subtle manifestations of it. The interest is still there but becomes more secretive. Many children's games allow embracing and kissing in a relatively impersonal structured way:

The charm of the whole thing is in the fact that under the guise of a ceremony love has its way (Bell, 1902, p. 339).

Campbell (1939) provides a review of studies of the preadolescent period. Throughout this review the conflict between those who would subscribe to the idea of the pre-adolescent period as asexual and those who hold differently is apparent. Some researchers cited felt that there is little heterosexual orientation before adolescence while others felt, like Bell, that there are indications of heterosexual orientation if one looks beyond such things as preference for the same sex in play activities. Some researchers felt that girls became more interested in the

opposite sex before boys and ascribed this to the girls' earlier puberty. The various researchers seem to take a position that heterosexual orientation is basically controlled by hormones or by cultural expectations and encouragement. The hormonal viewpoint, of which Freudian theory is an example, seems to be the more prevalent position.

Ellis (1949) hypothesized on the basis of a correlational study of college girls' attitudes that one has to learn how to love:

A girl's adult love attitudes are influenced by (a) the amount of love she experiences in her early family environment; (b) the head-start or delay of her first heterosexual love experiences; and (c) the number of friendly social contacts she has with males (Ellis, 1949, p. 14).

Ellis does not, however, discount the possibility that biological influences may affect a girl's entry into a love relationship. However, he feels that, for girls, an early favorable experience with being in love may enhance their capacity to achieve orgasm.

Broderick (1961), commenting on the increase in cross-sex friendships that he found, postulated that it may be due largely to the diminishing differences between the male and female sex roles and increasing value similarity:

In addition to the negative effect of lessening the need for defensive withdrawal, increasing consensus in important values has been shown to provide impetus to the development of friendly relations between the sexes (Broderick, 1961, p. 30).

He also speculated that early sexual experimentation may not be without negative implications. Early marriage and less clearly defined and accepted sex-roles may be the consequence of early heterosexual involvement.

Broderick and Rowe (1968), on the basis of data collected, postulated that until the child came to view marriage as desirable in his own future, he would not further relate during preadolescence to the opposite sex.

Broderick (1966) provides a good summary of the beliefs on and research pertaining to sexual behavior in middle childhood. He stated:

It seems probable that there has been more confusion over the course of heterosexual socialization during the period of middle childhood than during any other period (p. 17).

It should be pointed out that some authors seem to use the term "middle childhood" instead of "preadolescence." In both cases they seem to be referring to the span of time between eight and twelve years of age.

### Empirical Findings

There is more empirical research on overt sexual behavior in childhood such as masturbation and sex play in comparison to research dealing with heterosexual orientation. Heterosexual orientation includes interest in and psychological attitudes toward the opposite sex, interaction with the opposite sex in social situations, as well as the more specific manifestations of overt sexual



behavior. This section presents, in chronological order, some of the most important studies.

Moll (1923) stated that some preadolescent boys desire physical contact with the opposite sex "although these boys may exhibit no tendency to masturbate or manipulate their genital organs" (p. 30). Moll felt that the beginnings of the attraction to the opposite sex preceded puberty by three or four years.

Hamilton (1929) reported that 44 percent of the men and 45 percent of the women in his sample had their first love affair before the age of twelve (p. 227).

Campbell (1939) reported on observations made of children over a period of years at the Merrill-Palmer Institute in Detroit. From five to seven years of age the children seemed to ignore the sex of a playmate in choosing play groups. By age ten or eleven they tended to segregate themselves into same-sex groups. Campbell concluded on the basis of her observations that social relationships prior to eight years of age do not discriminate on the basis of sex, from eight years to puberty there is a rising preference for the same sex, and at puberty heterosexual feeling gradually begins to develop.

According to Lewis (1958) children in grades four, five, and six talk more freely about marrying and having children than they did in the past. Awareness of the opposite sex is more common and is manifested by an interest in their personal appearance.

In studying a southern, urban, middle-class community in the late 1950s Broderick and Fowler (1961) found increasing cross-sex friendship choices. Earlier studies in the 1920s and 1930s found almost no cross-sex friendship choices made by fifth graders but in their sample 20 percent of the fifth graders chose a child of the opposite sex as their best friend and 52 percent of the children listed at least one child of the opposite sex among their first four choices.

In a later study Broderick (1968) attempted to devise a Guttman scale from items of heterosexual interest and involvement. If items scaled in this manner it would lend support to the notion that there is a sequence of developmental steps through which children pass. The following five items did form an acceptable Guttman scale (in order of decreasing positive response):

1. Desire to marry
2. Had girlfriend/boyfriend
3. Had been in love
4. Prefers opposite sex companion for movies
5. Had had a date

Rutter (1971) provides a summary of psychosexual development in the middle childhood period that discounts the latency concept and stresses the importance of how permissive and encouraging the culture is toward heterosexual orientation at this stage in the child's life.

Martinson (1973) has a good summary of both the theoretical and empirical research concerning sexual development in childhood. He concluded:

In sum, sociological and anthropological data cast serious doubt on the universal applicability of the concept of preadolescent sexual latency. There has been a change over the years both in the attitude of boys and girls in the United States toward heterosexual involvement and in their experiencing of it. There has been a marked change toward greater heterosexual experience of preadolescents with their peers (p. 121).

### The Textbook Perspective

It appears that much of the theoretical and empirical knowledge has not filtered down to the general public. One reason for this is that textbook authors for the most part still portray the preadolescent period as lacking any heterosexual orientation. To illustrate how current textbooks conceptualize the period of middle childhood in terms of heterosexual orientation several texts will be cited. While no systematic selection was made the author believes these texts are representative of modern child development and child psychology approaches.

Watson and Lindgren (1973) listed Freud's stages of psychosexual development with its preadolescent latency period. This text does state that some psychoanalytic concepts have come under question as a result of empirical studies but other research on preadolescent heterosexual orientation is not cited. For example, there is a discussion of friendships in the middle and later years of childhood. No mention is made of cross-sex friendships. The studies cited were done in the 1940s and early 1950s.



One is led to believe by this text that friendships in middle childhood are exclusively homosexual.

Hurlock (1972) stated that the tendency is for children to want to associate with members of their own sex and that this tendency reaches a peak just before and during puberty. She then stated:

As the preference for members of their own sex develops, so does a cleavage between the sexes. Accompanying this cleavage is an antagonism toward members of the opposite sex. Boys and girls belittle one another's interest, skills, and activities; they refuse to associate with one another even at parties; and they are constantly bickering, name calling, and quarreling (p. 245).

Hurlock stated that this situation is most likely due to cultural influences. She also listed eight effects of this sex antagonism, all of which appear to be negative. These included unjustified feeling of male superiority, the fact that girls may resent being female and rebel against their sex appropriate behavior, and that social pressure will prevent boys and girls playing together even when they want to. She also stated that not developing common interests in middle childhood makes heterosexual adjustment in adolescence more difficult.

Bernard (1973) stated that boys and girls may play together up to about age ten but from there on friendships are basically homosexual. It is his contention that age and sex segregation in the preadolescent period are useful in helping the child learn differentiated roles (p. 343). There is no suggestion that children in middle childhood

are, or could be, interested in the opposite sex in a romantic way.

Medinus and Johnson (1969) defined the latency period and then stated:

Interests stimulated by intellectual curiosity now assume importance. This state of affairs continues until just before adolescence when a sharp rise in the production of hormones strongly reactivates the sexual impulse (p. 315).

They state that the adolescent must then adjust to the opposite sex. Sex cleavage in friendships is extremely marked in childhood, according to Medinus and Johnson. They felt that boys reject girls because they have been rejected by the girls first. In the early years of high school girls begin to accept boys again but the boys do not reciprocate for a few more years.

Smart and Smart (1972) report Reese's findings concerning acceptance of the opposite sex in grades five through eight which found both boys and girls tended to reject the opposite sex (but not as strongly as in earlier decades). They also report Broderick and Rowe's pre-adolescent heterosexual development scales which would seem to conflict with Reese's findings since, for example, about 40 percent of ten to twelve year old boys and girls in that research said they preferred a companion of the opposite sex for going to the movies. Also stated but not elaborated on are Freud's psychosocial stages including the latency stage.

Conger (1973) stated that peer relationships are basically homosexual in the preadolescent and early adolescent period. He recognized that this may be partly due to cultural impositions but also felt that it meets the needs of the child at this stage by allowing him or her to develop appropriate sex-role behavior (p. 306). The hostilities between the sexes are also seen as having another effect:

The sex antagonisms common in the preadolescent years appear to be at least partly self-protective and defensive, as though the young person were saying, I must be a real boy (or girl) because I'm certainly not like those strange persons of the opposite sex. Partly, too, antagonisms appear to facilitate an avoidance of pre-mature heterosexual relationships with which the emerging adolescent is unprepared to cope, and which consequently produce anxiety (p. 306).

Jersild (1968) stated that most children do not date or "go steady" before the teenage years but that many children do show romantic interest in the opposite sex before this. Many adults recall memories of childhood "sweethearts" (p. 296).

From the textbooks examined in this section it would thus appear that most text authors are not aware of or reject those studies that do show romantic interest between the sexes in the preadolescent period. The Jersild text was the only one examined that indicated the existence of this romantic interest but still stated that dating does not usually begin until the teen years.

### The Popular Press Perspective

Journalists and popular press authors have done a better job in chronicling the changes that have been taking place among preadolescents. Martha Lear in a book entitled The Child Worshipers discussed changes taking place in the socialization of the preadolescent. Dances, dinner parties, dates, etc., are considered normal activities for this age group in some places and the parents, especially the mothers, tended to be worried if their children were not participating in these activities. Lear felt that some parents have few misgivings about the appropriateness of these things for their children but:

There are others who have their doubts, but seek solace in nostalgic musings. One mother said recently, "They're not really so much more precocious than we were. It just seems that way. I can remember when I was eleven we went to boy-girl parties and played post office." And turning to her own eleven-year old, she asked, "Are you kids playing post office yet?" No, the child said. "Spin the bottle?" No. "Any kissing games at all?" "Oh, we have kissing," said the blushing babe, "but my goodness Mother, it's not games" (pp. 111-12).

An article in Time concluded that the dating, dancing, kissing games, etc., that used to be exclusively associated with adolescence are increasingly being engaged in by eight to twelve year olds in the United States. An article in Esquire (Braun, 1968) refers to a certain segment of preadolescents as "micro-boppers" and states that they are becoming an increasingly visible subculture and that sex is part of their lifestyle.



Summary

There is much confusion over heterosexual orientation during preadolescence. Broderick's previously mentioned contention that this is the least understood period of heterosexual socialization seems supported by the many contradictions in the empirical findings and theoretical positions presented in this chapter. According to the popular press and some research findings, primarily that of Broderick and his associates, there is a definite increase in heterosexual interest and activities in the preadolescent period. Most theoretical positions have not incorporated this knowledge into their framework and consequently still present a picture of a preadolescent stage with no heterosexual orientation, whether they call it "latency" or not.

There is very little empirical evidence as to the extent of preadolescent heterosexual orientation. Most of the material in the popular press is based on anecdotal, scattered reports. There appears to be little research on the correlates of this newly discovered heterosexual orientation. This study hopes to provide not only a description of the extensiveness of this orientation in a large sample but to determine what some of the correlates of involvement with the opposite sex are at this stage in the child's life. This information should help clear up some of the confusion in theoretical perspectives that currently exists.

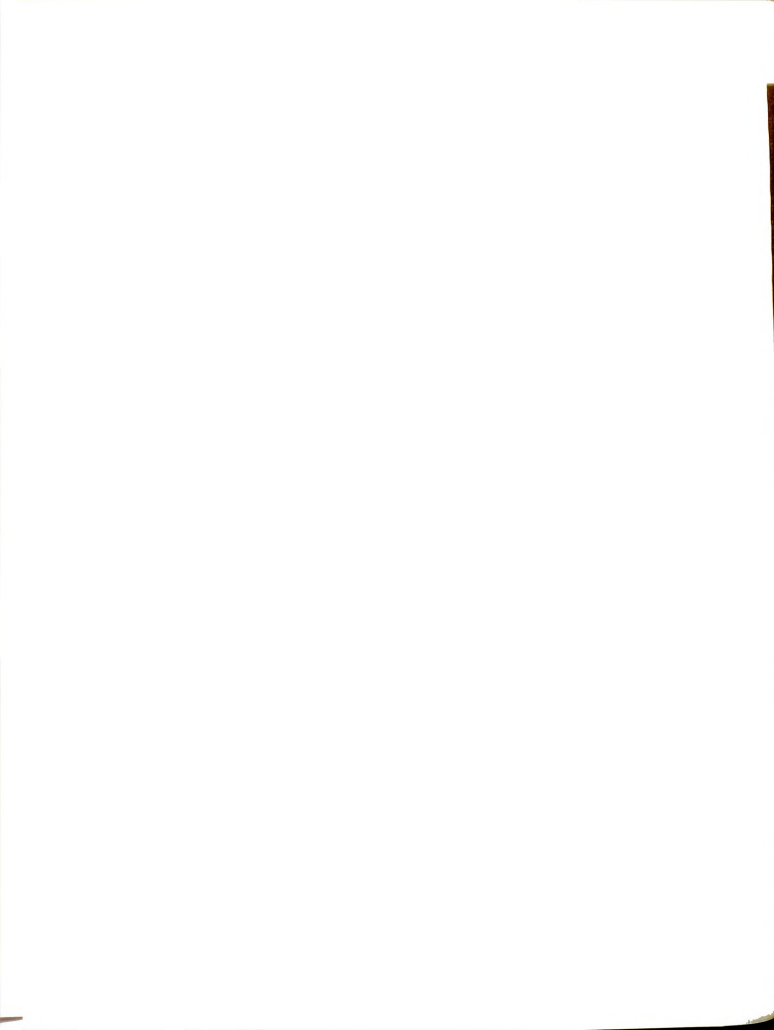
## CHAPTER III

### RESEARCH METHODOLOGY

#### The Research Instrument

The research instrument consisted of fifty-five forced-choice questions. The questions were pre-tested with preadolescent children to assure comprehension. The only questions where comprehension was likely to be a problem involved those concerned with drug usage. These were retained since those students who had used such substances would likely be familiar with the terminology. The classroom teachers were instructed to tell those children who asked questions concerning what such things were that if they did not know they had probably not used them and to mark their answer sheets accordingly. The students were assured that their responses would remain anonymous and that no one, including their teachers, would know how they answered the questions.

Many questions used in the instrument represented the most typical questions from scales used in questionnaires administered to high school students by the same research team in 1969 and 1973. In some cases the language



had to be simplified for use with this grade school sample.

Five questions concerned general background information; 10 heterosexual orientation; 12 drug, alcohol, and cigarette usage; 7 school attitudes, preferences, and aspirations; 5 depression; and 4 delinquency. The remaining questions concerned various topics.

The students marked their response to each question on a standard answer sheet for machine scoring. While the questionnaires used for the high school samples in the previously mentioned research were much lengthier, it was felt that too many questions would tax the attention span of these preadolescent students and possibly weaken the validity of the responses. The appendix contains a copy of the research instrument.

#### Description of the Sample

The sample consisted of all fourth, fifth, and sixth grade children in a west shore Michigan community who were present in March, 1973 on the day of the testing. Enrollment figures for September of the previous year indicated a total of 1,429 students in these three grades. Usable questionnaires were obtained from 1,334 students. Even assuming no families moved out of the area between September and March, data is available on over 93 percent of the population. For all practical purposes, then, the data represent the preadolescent population of the community.

The community sample has been identified as "Community B" in other research (Vener, Stewart, and Hager, 1972, p. 697). It is primarily white, noncollege, and non-metropolitan:

whose school district serves 25,000 residents (less than five miles from a SMSA of 150,000), is composed mainly of lower-middle and upper-working class levels with 40 percent of the male wage earners being employed in white collar occupations. Estimated median family income in 1969 was \$9,500 (Vener, Stewart, and Hager, 1972, p. 697).

It is felt that the community is fairly representative of those of similar socioeconomic levels. Research on the adolescent population of this community gave results that compared very similarly to regional and national samples in terms of drug use, involvement in sexuality, and religious beliefs (Stewart, Vener, Hager, and Zaenglein, in process). It is not clear whether the results of this study could be generalized to a community that is largely lower class or largely upper class.

#### Data Collection

The data used in this study were collected in March, 1973 by a research team consisting of Arthur Vener, Cyrus Stewart, and Mary Margaret Zaenglein-Senger. Each classroom teacher read the questions along with the children at least two times. The teachers were instructed not to go on to the next question until each child had answered the question being read. The teachers were instructed to

answer only procedural questions relating to the mechanics of filling out the questionnaire.

Before this method was decided upon a number of alternatives were considered and rejected. The use of graduate students to read the questions was considered but rejected due to complicated problems of logistics since all classrooms were to be tested at the same time. This procedure was necessary in order to prevent children from discussing the questionnaire with others who might not have as yet taken it. The administrators of the schools involved expressed a willingness to administer the questionnaire themselves but this also was rejected after considering problems of personnel availability and the previously mentioned desire to have all classrooms tested simultaneously.

At one point, in order to achieve some standardization of procedures, it was proposed that the Assistant Superintendent of Schools use a tape recorder to record the questions. However this notion was also rejected in light of such problems as timing, tempo of delivery, and the logistics and mechanical difficulties involved in using a large number of tape recorders. The research team felt that the final method chosen was the most feasible and limited systematic bias to some extent.

## CHAPTER IV

### ANALYSIS PLAN AND RESEARCH HYPOTHESES

Positive Heterosexual Orientation (H.O.) is defined as interest in and interaction with the opposite sex on a social basis. It includes physical behaviors such as kissing and necking but is not limited to these activities. Operationally, Heterosexual Orientation was measured by adding the responses the subject made to each of the seven items in the index. They were:

1. kissing experience
2. kissing and hugging (necking) experiences
3. dating experience
4. going steady experience
5. having asked for a date
6. having been asked for a date
7. having had an opposite sex friend

For each item in the questionnaire differences between children who scored low (scores in the lowest 31 percent of the distribution), medium (scores in the middle 41 percent of the distribution), and high (scores in the highest 28 percent of the distribution) on the Heterosexual Orientation Index were examined through the formation of contingency tables. These tables were formed for each item in the questionnaire using the three levels of

Heterosexual Orientation. Analyses were performed with all subjects combined, by sex, and by sex and age. The contingency tables were analyzed by use of the chi square statistic.

The study attempted to derive Guttman scales from the questions pertaining to heterosexual orientation. Questions 39, 41, 45, and 46 appeared in the Guttman scale devised by Broderick and Rowe (1968). These questions were subjected to a Guttman scale analysis. Other attempts were made to construct additional scales using all the questions in the H.O. index plus question number thirty-nine concerning marriage orientation. The main statistic used in the analysis of the Guttman scales was the coefficient of reproducibility which is defined as:  $1 - \frac{\# \text{ of errors}}{\# \text{ of responses}}$ . Errors in this sense are deviations from exact scale responses that would be found if the items did in fact form a perfect unidimensional and cumulative sequence. The main reference for this technique is Guttman (1950). In addition, the minimum marginal reproducibility was computed for each scale. The minimum marginal reproducibility is the minimum coefficient of reproducibility that could have been obtained considering the proportion who answered each item positively and negatively. This minimum value is obtained because of the cumulative interrelation of the items. The difference between the two coefficients is called the percent improvement. Note that it is really a difference between two percents rather than



itself being a ratio. The percent improvement is due to the sequential response pattern rather than the inherent cumulative interrelation between items. The coefficient of scalability is defined as: 
$$\frac{\text{Percent Improvement}}{1 - \text{Minimal Marginal Reproducibility}}$$
 It should be above .6 if the scale is really unidimensional and cumulative.

Marginal totals were computed for each item in the questionnaire by sex, by age, by age and sex, and for the total group. Inter-item correlations were computed between all items.

### Hypotheses

The general reasoning behind many of the specific hypotheses in this section is that among preadolescent children moderate to high heterosexual orientation is a normal part of psychosexual development. This is thought to be the case because many parents seem to encourage their children to be popular with the opposite sex (while discouraging all but minor physical involvement, i.e., kissing). Also it is becoming more common for schools to have dances and other functions for grade school children. It should be noted that the items included in the H.O. index do not include the more advanced forms of sexuality. The index includes such things as dating experience, love feelings, kissing, and necking behavior but not petting or intercourse. Questions concerning the later behaviors were eliminated from the questionnaire due to concerns

over parental reaction. In addition, incidences of these behaviors are expected to be low. A child may therefore score high on the scale with little or no actual participation in any sexual activity more advanced than necking. The specific research hypotheses and the rationale for each follow.

#### Hypothesis One

Scores on the Heterosexual Orientation index will be negatively related to measures of nonconformity.

The reasoning behind this hypothesis is that, according to popular press sources, preadolescent heterosexual interaction is becoming a normative behavior in many communities. If this is the case it would be possible for the preadolescent to be high in heterosexual orientation without engaging in those behaviors that have been considered nonconforming. It is recognized that the sociological literature reveals a relationship between early participation in sexual activities such as intercourse and petting and other nonconforming behaviors for the adolescent. It is felt however that the items included in the H.O. index are such that the preadolescent could have responded positively to them and yet still be basically a conformist, since among some communities there appears to be parental support and encouragement of preadolescent heterosexual interaction. Few parents or communities sanction participation in advanced sexual activities such

as petting and intercourse among young adolescents and therefore it is not surprising that there is a relationship between participation in them and other nonconforming behaviors.

This study will consider the following items as representing nonconformity for the preadolescent population:

- a. smoking
- b. drug usage and perception of drug availability
- c. alcohol usage
- d. theft
- e. vandalism
- f. fighting
- g. truancy
- h. unfavorable police perception

Even if heterosexual orientation represents a conforming behavior among the preadolescents themselves, it is possible that some adults would regard this as an example of nonconformity. This is especially likely to be the case when most textbooks and "common sense" states that heterosexual orientation is not a normal experience of preadolescents. Stewart, Vener, Hager, and Zaenglein (in process) have indicated that whether a behavior represents conformity or nonconformity depends on the perspective involved: adult or youth. This study will regard conformity as engaging in a behavior that at least 50 percent of the reference group has participated in, regardless of adult views toward that behavior.

Stewart and Livson (1966) in a longitudinal study found that nonconformist rebellion against authority

preceded the beginning of smoking behavior. They suggest that the evidence supports the same etiology in the use of alcohol and drugs. Early heterosexual orientation could serve the same function of expressing rebellion against adult authority if it is indeed seen as an undesirable activity for preadolescents by the adults of the community. This study is hypothesizing that it will not serve this function due to the supposedly increasing acceptance of heterosexual orientation as acceptable and normal for the preadolescent.

#### Hypothesis Two

Scores on the Heterosexual Orientation index will be negatively related to measures of stress.

This study will consider the following items as indicators of stress:

- a. suicidal thoughts
- b. boredom
- c. sadness
- d. self-concern
- e. desire for attention
- f. physical abuse from parents
- g. ability to communicate with parents
- h. perception of parental acceptance
- i. perception of parental congeniality

Vener, Stewart, and Hagar (1972) found that, among adolescents, depression as measured by such things as boredom, lack of motivation, self-disparagement, and pessimism was higher among those adolescents that were not closely identified with their families or were alienated from the school system. They stated:

The depressed adolescent tends to experience conflicting self-other orientations which place him in a double-bind situation. He needs to establish affectional relationships with others to bolster a weakended ego structure, while simultaneously he lacks a basic trust in others. This mistrust of others is intensified by his perception of his inadequacy relative to his age-mates with respect to status attainment in the peer social system (p. 12).

If heterosexual orientation does in fact indicate a conforming behavior that is supported by the adult population then it seems clear that the student high in heterosexual orientation will be more integrated into the family and school system and therefore experience less stress. In addition since heterosexual orientation would presumably require some ability to relate to others, the preadolescent under stress may be less able to make this contact.

Little is known about the significance of suicidal thoughts in children, but among those who have actually made an attempt at suicide there often is a sense of depression, loneliness, and a feeling of being unpleasantly different from most people (Shaw and Schelkum, 1965). These feelings would not be conducive to the establishment of heterosexual involvement. The loner is not likely to score very high on the H.O. index.

### Hypothesis Three

Scores on the Heterosexual Orientation index will be positively related to favorable attitudes toward school, teachers, and perception of one's intelligence.

Success in school and favorable attitudes toward the educational system depends, at least in part, on possessing a conforming middle class orientation (Travers, 1970). Middle class parents are likely to take an interest in their children's school performance and encourage them in their efforts. Middle class children are more likely to have the verbal skills and cultural background needed for success. They are more likely to be able to defer immediate gratification for increased future rewards. There is some evidence that teachers discriminate against lower class children (Hoehn, 1954).

To the extent that Heterosexual Orientation is related to conformity it should also be related to school attitudes, at least in a middle class population. This presents somewhat of a problem since the present population contains both working class and middle class families. It seems likely that the working class families would have attitudes toward school more similar to the middle class than to the lower class since a high school education is now needed for many blue collar jobs.

In addition, much of the interaction with the opposite sex at these ages appears to take place in the school setting in activities organized through the school. Therefore, those children with negative attitudes toward school may not participate in these activities.

Those children who have difficulty in school are likely to find it difficult to interact socially with their

peers (Mussen, Conger, and Kagan, 1969). This would likely affect interaction with the opposite sex as well as the same sex and lead to lower heterosexual orientation.

#### Hypothesis Four

Scores on the Heterosexual Orientation index will be positively related to college orientation.

Duvall (1964) stated there is a positive correlation between not wanting to go to college and being in love in high school. However, it is felt that since love at the preadolescent stage cannot lead to an immediate marriage this relationship will not be evident. This hypothesis closely follows the preceding one in that those who have favorable attitudes toward school will likely have more desire to go to college than those with less favorable attitudes toward school. The notion of conformity is also involved here. If heterosexual orientation is, in fact, related to conformity at this stage of development, then all those behaviors indicative of a conventional orientation should be associated with it.

#### Hypothesis Five

Children from a large family (have three or more siblings) will report that they want to have large families more frequently than do those who come from smaller families.

Landis has stated:

There is some evidence that family size is a matter in part of family tradition, for there seems to be a definite family-size relationship running through the generations. Those children who come from large families tend to have large families. This is more true if the mother comes from a large family than if the father does, although it holds true somewhat for both. It seems also to hold for all social classes (1965, p. 611).

A summary of findings on the relation between family size of successive generations can be found in Berent (1953). While children from large families tend to have large families this does not prove that these preferences are established by the preadolescent period. However, much of the psychological literature stress how many important things concerning families are learned in the first few years of life. This hypothesis is also consistent with the notion that one is usually most comfortable with the known rather than the unfamiliar. If one has been relatively happy as a child in a large or small family it is likely that one would desire to replicate that family environment that has provided happiness.

#### Hypothesis Six

Scores on the Heterosexual Orientation index will be positively related to favorable attitudes toward marriage.

Since marriage requires an orientation toward the opposite sex those children involved with the opposite sex may have developed favorable attitudes toward marriage. Broderick and Rowe (1968) felt that marriage orientation



was necessary before heterosexual socialization could take place and that marriage orientation was, in fact, the first step in the development of heterosexual orientation.

The present study does not wish to make the assumption, a priori, that marriage orientation is the first point on a continuum of heterosexual orientation. One author (Sussman, 1972) has questioned the appropriateness of this in an age when marriage is no longer being extolled as much as it has been in the past. The rationale behind this hypothesis is that while marriage orientation may not necessarily be the first step in the development of heterosexual orientation, those children who are high in heterosexual orientation are more likely to see marriage in a favorable light than those whose orientation to the opposite sex is less developed.

#### Hypothesis Seven

Boys will have more negative attitudes toward marriage than girls.

A recent study in England (Clautour and Moore, 1969) among twelve year olds found over 90 percent of the girls had a positive attitude toward marriage while 57 percent of the boys had positive attitudes, 34 percent negative ones, and 9 percent were neutral. This study found no significant differences in intelligence, social class, or adjustment between those boys who had a positive attitude toward marriage and those whose attitude was negative.

Broderick and Rowe (1968) found 85 percent of ten to twelve year old girls wanted to get married while 62 percent of the boys wanted to get married ("not sure" responses were counted as negative).



## CHAPTER V

### RESEARCH FINDINGS

#### Distribution of Respondents by Age and Sex

Table 1 shows the number and percentage of respondents at each age level by sex. There were 1,334 respondents in the study. It can be seen that there were only four students who were eight years of age or younger while there were 695 who were eleven or older. The age divisions employed in the questionnaire would have been more appropriate in the beginning of the school year when the questionnaire was originally planned to be administered. However, the school system was threatened by a teacher strike at this time and the administration, as well as the research team, decided that it would be prudent to delay data collection until this situation resolved itself. Unfortunately many children had birthdays between this time and March when the questionnaire was actually administered. There were 689 males (52 percent of total) and 645 females (48 percent of total). The four eight year old respondents were included in the various computations performed but were excluded in presentation of any age table since to

Table 1.--Age-Sex Distribution of Subjects (In Percents).

Age	Sex		Total
	Boy	Girl	
8 or younger	3 ( 75%) (0.5%)	1 ( 25%) ( 0%)	4 (100%) (0.5%)
9	85 ( 43%) ( 12%)	115 ( 57%) ( 18%)	200 (100%) ( 15%)
10	226 (52%) (33%)	209 ( 48%) ( 32%)	435 (100%) ( 33%)
11 or older	375 ( 54%) ( 54%)	320 ( 46%) ( 50%)	695 (100%) ( 52%)
Total	689 ( 52%) (100%)	645 ( 48%) (100%)	1,334 (100%) (100%)

have included them would have made the tables more confusing and would have added little useful information.

#### Heterosexual Behavior by Age and Sex

Table 2 shows by age and sex the percentage (rounded to the nearest whole number) of those children who claimed to have ever had a boyfriend (for girls) or a girlfriend (for boys), to have been in love with someone of the opposite sex, to have kissed or been kissed, to have hugged and kissed a lot, and to have gone steady. Overall 76 percent of the students report having had an opposite sex friend. More girls report this at each age level than do

Table 2.--Incidence of Heterosexual Behavior by Age and Sex (In Percents).

Age by Sex								Total	Signifi- cance
9		10		11+					
Boys	Girls	Boys	Girls	Boys	Girls				
n=									
(85)	(115)	(226)	(209)	(375)	(320)	(1,330)			
<u>Had opposite sex friend</u>								$\chi^2 =$ 483.9 DF = 35 p<.001	
No	39	28	27	20	22	18	23		
Yes	60	72	73	80	77	81	76		
<u>Has been in love</u>								$\chi^2 =$ 85.6 DF = 21 p<.001	
No	46	40	38	41	41	45	42		
Yes	54	60	61	57	59	54	57		
<u>Has kissed or been kissed</u>								$\chi^2 =$ 456.7 DF = 28 p<.001	
No	54	46	44	44	43	45	45		
Yes	45	53	55	55	56	54	54		
<u>Hugged and kissed a lot</u>								$\chi^2 =$ 477.8 DF = 28 p<.001	
No	72	74	76	79	66	77	73		
Yes	27	26	24	19	33	23	26		
<u>Had gone steady</u>								$\chi^2 =$ 43.59 DF = 28 p<.05	
No	75	81	73	81	68	73	74		
With one person	14	15	14	11	14	14	14		
With two persons	6	1	4	5	6	5	5		
With three persons	1	1	0	2	5	3	3		
With four or more persons	4	3	8	1	7	4	5		

boys but the difference between the sexes decreases to 4 percent at age eleven or older (designated from here on as eleven plus). It can be noted that even in that group which is lowest in reporting this involvement (nine year old boys) 60 percent have had a girlfriend at one time. The chi square for this contingency table was significant at the .001 level.

Overall 57 percent of the students reported that they had been in love while 42 percent reported that they had not. The figures do not differ dramatically across the age groups. It is interesting to note, however, that a higher percentage of ten and eleven plus year old boys report having been in love than do girls at these ages. The chi square for this contingency table was significant at the .001 level.

Fifty-four percent of the students reported that they have kissed or been kissed by a member of the opposite sex while 45 percent reported they had not. More girls report this behavior at nine years of age but at ages ten and eleven plus the percentages are nearly equal for both girls and boys. The chi square for this contingency table was significant at the .001 level.

Concerning kissing and hugging a lot, 26 percent of the students reported that they had engaged in this behavior while 73 percent reported they had not. The percentages for nine year old boys and girls are similar but boys seem to gain this experience more rapidly than girls with





increasing age. Thirty-three percent of the eleven plus year old boys report this behavior while 23 percent of the eleven plus year old girls report it. The chi square for this contingency table was significant at the .001 level.

Seventy-four percent of the students have never gone steady, 14 percent have gone steady with one person, 5 percent with two persons, 3 percent with three persons, and 5 percent with four or more persons. At all age levels a slightly higher percentage of boys reported that they have gone steady at least once. The chi square for this contingency table was significant at the .05 level.

Table 3 shows the percentage of students by age and sex who have had a date, had asked for a date, and had been asked for a date. Overall 18 percent have had a date and 81 percent have not. Girls have dated more among the nine year olds but by age eleven plus more boys have dated than girls. For boys the percentages at ages nine, ten, and eleven plus were: 6 percent, 13 percent, and 26 percent. For girls the corresponding percentages were 13 percent, 13 percent, and 19 percent. The chi square for this contingency table was significant at the .001 level.

Overall 85 percent of the respondents reported that they have never asked for a date, 9 percent that they asked for a date once, and 6 percent that they had asked for a date more than once. As might be expected the percentages among the girls are very low since asking for a date is a traditionally masculine prerogative. Among the eleven plus

Table 3.--Dating Behavior by Age and Sex (In Percents).

Age by Sex								Signifi- cance
9		10		11+		Total		
Boys	Girls	Boys	Girls	Boys	Girls			
n=								
	85	115	226	209	375	320	1,330	
<hr/>								
<u>Had date</u>								$\chi^2 =$
No	93	85	85	86	73	80	81	91.5
Yes	6	13	14	13	26	19	18	DF = 28
								p<.001
<u>Had asked for date</u>								$\chi^2 =$
No	88	96	81	91	73	95	85	340.9
Yes, once	7	2	13	8	13	3	9	DF = 21
Yes, more than once	5	2	6	0	15	2	6	p<.001
<u>Had been asked for date</u>								$\chi^2 =$
No	86	84	83	74	76	66	76	483.3
Yes, once	8	10	12	19	13	21	15	DF = 28
Yes, more than once	5	7	5	8	10	13	9	p<.001

year old boys a total of 28 percent have asked for a date at least once. The chi square for this contingency table was significant at the .001 level.

Overall 76 percent of the respondents reported that they had never been asked for a date, 15 percent that they had been asked for a date once, and 9 percent more than once. There is an increase in this from ages nine to eleven plus, especially among girls. Thirty-four percent of the eleven plus year old girls report having been asked for a date at least once while 23 percent of these boys report that have been asked at least once. The chi square for this contingency table was significant at the .001 level.

Marriage Family Orientation  
by Age and Sex

Table 4 presents marriage and family size orientation by age and sex. Overall 14 percent reported that they do not want to get married, 33 percent were not sure, and 52 percent wanted to get married. There are large differences between the boys and girls on this but little difference between age levels. Among the eleven plus year old boys the percentages are: 20 percent do not want to get married, 40 percent are not sure, and 41 percent do not want to get married. The corresponding percentages among the girls are: 6 percent, 33 percent, and 61 percent. The

Table 4.--Marriage and Family Size Orientation by Age and Sex (Percent Down by Sex).

Statement of the Questions	Age by Sex						Total	Signifi- cance
	9		10		11+			
	Boys	Girls	Boys	Girls	Boys	Girls		
	n =							
	85	115	226	209	375	320	1,330	
<hr/>								
<u>Marriage</u>								
Doesn't want to get married when grown	22	9	22	9	20	6	14	$\chi^2 =$ 303.83 DF = 35 p<.001
Not sure about marriage	28	30	28	33	40	33	33	
Wants to get married when grown	49	62	50	58	41	61	52	
<u>Family Size</u>								
Doesn't want to get married	25	10	27	10	26	7	18	$\chi^2 =$ 123.79 DF = 28 p<.001
Wants a family with no children	12	3	6	5	6	4	5	
Wants a family with one child	11	12	16	9	12	14	13	
Wants a family with two children	32	60	28	48	36	52	42	
Wants a family with three or more children	21	15	23	28	21	23	22	



chi square for this contingency table was significant at the .001 level.

Concerning desired family size 18 percent reported that they do not want to get married, 13 percent desire a family with one child, 42 percent desire one with two children, and 22 percent desire three or more children. Girls are more interested in getting married and having more children than are boys. The chi square for this contingency table was significant at the .001 level.

#### Heterosexual Orientation Levels

Table 5 presents the correlation matrix of the items that were considered for the heterosexual orientation (H.O.) index. It was determined that the correlations were such that all the items could be used satisfactorily in the H.O. index. The score on this index was computed for each student by summing the responses to each item in the index. The students were then divided into groups whose scores were low, medium, and high. Approximately 31 percent were in the low group, 41 percent in the middle group, and 28 percent in the upper group. Those in the low group received a score of eight or nine on the index. Those in the middle group received a score of ten, eleven, or twelve. Those in the upper group received a score between thirteen and twenty-one.

Table 6 shows the percentages and frequencies of the H.O. scores by age and by sex. It can be seen that

Table 5.--Correlation Matrix of Heterosexual Orientation Items (n=1334).

Activity	1	2	3	4	5	6	7	8
1. Kissing	1.00	.45	.30	.30	.26	.35	.43	.42
2. Kissed and hugged a lot		1.00	.38	.37	.37	.37	.33	.26
3. Had a date			1.00	.31	.52	.47	.23	.23
4. Had gone steady				1.00	.40	.40	.30	.21
5. Asked for a date					1.00	.41	.24	.21
6. Been asked for a date						1.00	.25	.26
7. Been in love							1.00	.44
8. Had opposite sex friend								1.00

All r's are significant ( $p < .001$ ).





Table 6.--Heterosexual Orientation by Sex and Age (Percent Across).

H.O. Level	Sex		Age			Total
	Boys	Girls	9	10	11	
Low	31%	30%	36%	30%	29%	31%
	209	195	72	130	202	404
Medium	38%	45%	46%	43%	38%	41%
	257	288	92	186	267	545
High	31%	25%	18%	27%	32%	28%
	215	161	35	116	225	376
Total	100%	100%	100%	100%	100%	100%
	683	645	199	432	694	1,325
Signifi- cance	$\chi^2 = 9.0$		$\chi^2 = 24.75$			
	DF = 2		DF = 6			
	p<.025		p<.001			



scores increase with increasing age level. Eighteen percent of the nine year olds, 27 percent of the ten year olds, and 32 percent of the eleven plus year olds obtained high scores on the index. The chi square for the contingency table by age was significant at the .001 level.

There are approximately the same percentage of boys and girls at the low level but there were 6 percent more boys at the high level (31 percent vs. 25 percent). The chi square for the contingency table by sex was significant at the .025 level.

Kissing and Necking by Sex, Age,  
and H.O. Level

Table 7 shows by sex, age, and H.O. level the percentages of students in each category reporting having engaged in kissing and necking (defined as kissing and hugging a lot). At least 90 percent of both boys and girls of all ages who were in the high H.O. level have kissed. For necking behavior the average of the different percentages for those high in H.O. show approximately two-thirds have engaged in this behavior. On the other hand, less than 10 percent of those in the low H.O. level have any kissing experience and almost none of them have any necking experience. The chi square for both of these contingency tables were significant at the .001 level.

Table 7.--Kissing and Necking Behavior by Age, Sex, and H.O. Level (Percent in @ Cell Who Have Engaged in Behaving).

H.O. Level	Age by Sex						Signifi- cance
	9		10		11+		
	Boys	Girls	Boys	Girls	Boys	Girls	
<u>Kissing</u>							
Low	3% (1)	13% (5)	5% (3)	6% (4)	8% (9)	3% (3)	$\chi^2 = 623.52$
Medium	64% (23)	66% (37)	67% (64)	68% (62)	63% (78)	64% (90)	DF = 17
High	100% (14)	95% (19)	92% (58)	94% (49)	90% (124)	91% (80)	p<.001
<u>Necking</u>							
Low	0% (0)	0% (0)	0% (0)	3% (2)	0% (0)	0% (0)	$\chi^2 = 484.08$
Medium	36% (13)	27% (15)	19% (18)	12% (11)	19% (23)	12% (17)	DF = 17
High	71% (10)	71% (15)	59% (37)	52% (26)	72% (99)	66% (57)	p<.001



### Hypothesis One: Nonconformity

Hypothesis One stated that Heterosexual Orientation would be negatively related to measures of nonconformity. This hypothesis was rejected. All measures of nonconformity were positively related to heterosexual orientation.

### Drug Usage and Perception of Drug Availability

Table 8 presents the percentage and frequencies of drug usage (including cigarette smoking) by H.O. level. Seventy-nine percent of the students who smoke two or three cigarettes per day scored high on the H.O. index. Eighty-three percent of those who smoke four to ten cigarettes a day scored high on the H.O. index. Seventy-five percent of those who smoke eleven or more cigarettes per day scored high on the H.O. index. The chi square for this contingency table was significant at the .001 level. It can be noted that only eighty-six students (6 1/2 percent of the total) are regular smokers although another 24 percent have tried it a few times.

Concerning marijuana use, 80 percent of those who have used marijuana once were in the high H.O. level. Seventy-one percent of those who have used marijuana two to four times were in the high H.O. level. One hundred percent of those who have used it either five to seven times or eight or more times were in the high H.O. level. Overall fifty-one students (or approximately 4 percent of



Table 8.--Drug Usage by H.O. Level (Percent Across).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Cigarette Smoking</u>				
Don't smoke	38% (353)	42% (385)	20% (179)	$\chi^2 =$
Tried it a few times	16% (51)	45% (145)	40% (129)	195.42
2-3/day	2% (1)	19% (10)	79% (41)	DF = 8
4-10/day	11% (2)	6% (1)	83% (15)	
11+/day	0% (0)	16% (4)	75% (12)	
Total	31% (407)	41% (545)	28% (376)	p<.001
<u>Marijuana Use</u>				
Never used	32% (405)	42% (538)	26% (334)	$\chi^2 =$
Used once	6% (2)	14% (5)	80% (29)	78.77
2-4 times	0% (0)	29% (2)	71% (5)	DF = 8
5-7 times	0% (0)	0% (0)	100% (3)	
8+ times	0% (0)	0% (0)	100% (5)	
Total	31% (407)	41% (545)	28% (376)	p<.001
<u>Psychedelic Use</u>				
Never used	31% (406)	42% (544)	27% (355)	$\chi^2 =$
Used once	5% (1)	5% (1)	90% (18)	45.89
2-4 times	0% (0)	0% (0)	100% (1)	DF = 6
5-7 times	0% (0)	0% (0)	0% (0)	
8+ times	0% (0)	0% (0)	100% (2)	
Total	31% (407)	41% (545)	28% (376)	p<.001
<u>Aspirin Use in Previous Week</u>				
Not used	34% (273)	41% (329)	25% (198)	$\chi^2 =$
Used once	30% (75)	40% (101)	30% (76)	27.60
Used twice	23% (26)	47% (152)	30% (33)	DF = 6
Used 3+ times	20% (33)	37% (61)	42% (69)	
Total	31% (407)	41% (543)	28% (376)	
				p<.001
<u>Aspirin in Use Without Parental Knowledge</u>				
Never used without parental knowledge	36% (352)	42% (419)	22% (219)	$\chi^2 =$
Had used without parents' knowledge	17% (55)	38% (123)	46% (150)	78.61
Total	31% (407)	41% (542)	28% (369)	DF = 2
				p<.001



Table 8.--Continued.

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Speed Use</u>				
Never used	31% (404)	41% (541)	28% (369)	$\chi^2 =$ 10.28
Used once	13% (1)	50% (4)	38% (3)	
2-4 times	50% (1)	0% (0)	50% (1)	DF = 6
5-7 times	0% (0)	0% (0)	0% (0)	
8+ times	0% (0)	0% (0)	100% (3)	p<.250
Total	31% (406)	41% (545)	28% (376)	
<u>Hard Drug Use</u>				
Never used	31% (404)	41% (544)	28% (364)	$\chi^2 =$ 19.27
Used once	23% (3)	8% (1)	69% (9)	
2-4 times	0% (0)	0% (0)	100% (2)	DF = 6
5-7 times	0% (0)	0% (0)	0% (0)	
8+ times	0% (0)	0% (0)	0% (0)	p<.005
Total	31% (407)	41% (545)	28% (376)	
<u>Downer Use</u>				
Never used	31% (407)	42% (542)	27% (355)	$\chi^2 =$ 47.73
Used once	0% (0)	7% (1)	93% (13)	
2-4 times	0% (0)	17% (1)	83% (5)	DF = 8
5-7 times	0% (0)	100% (1)	0% (0)	
8+ times	0% (0)	0% (0)	100% (3)	p<.001
Total	31% (407)	41% (545)	28% (376)	



the total) have smoked marijuana at least once. The chi square for this contingency table was significant at the .001 level.

Psychedelics were defined as "like LSD, STP, and mescaline." The vast majority of those who have ever used psychedelics are in the high H.O. level. Ninety percent of those who have used them once, 100 percent of those who have used them two to four times, and 100 percent of those who have used them eight or more times are in the high H.O. level. The chi square for the contingency table was significant at the .001 level. Only twenty-three (or approximately 2 percent of the total) have used psychedelics at least once. In fact, only three students have used them more than once; the rest reported only one use.

The students were asked how many times during the previous week they had used aspirin. Thirty-four percent of the low H.O. level, 40 percent of the medium, and 47 percent of the high level students had used aspirin at least once during the previous week. Among those who had used it three or more times in that week 8 percent, 11 percent, and 18 percent were in the low, medium, and high H.O. levels respectively. The chi square for the contingency table was significant at the .001 level. In addition, 14 percent of the low H.O. level students had at sometime used aspirin without their parents' knowledge while 23 percent of the medium and 41 percent of the high level students had done



so. The chi square for this contingency table was also significant at the .001 level.

About 1 percent of the students reported any use of speed (defined as "like benzedrine, dexedrine, and methedrine"). The tendency was for a larger percentage of the users to be in the high H.O. level but the relationship was not as strong as in the case of marijuana or psychedelic use. The chi square for this contingency table was not significant. Again, about 1 percent of the students reported at least one use of hard drugs (defined as "like heroin, cocaine, and morphine"). Most of the users were in the high H.O. level. The chi square obtained was significant at the .01 level. Slightly less than 2 percent of the students reported use of downers (defined as "like barbiturates, seconal, and phenobarbital"). Most of these students (88 percent) were in the high H.O. level. The chi square was significant at the .001 level.

Table 9 shows the perceived ease of drug availability by H.O. level. Ninety percent of the students in the low H.O. level feel it would be very hard or kind of hard to obtain drugs. Eighty-one percent of those in the medium level feel it would be very hard or kind of hard, while only 72 percent of those high on the H.O. index feel it would be very hard or kind of hard. The chi square obtained was significant at the .001 level.

Table 9.--Perception of Drug Availability by H.O. Level (In Percents).

If You Wanted to Get Drugs, How Hard Would it Be?	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
Very Hard	36% 315 79%	41% 358 66%	23% 202 54%	$\chi^2 = 58.18$ DF = 6 p<.001
Kind of Hard	23% 43 11%	43% 82 15%	34% 65 18%	
Fairly Easy	12% 13 3%	40% 42 8%	48% 50 13%	
Very Easy	20% 29 7%	42% 60 11%	38% 54 15%	
Total	31% 400 100%	41% 542 100%	28% 371 100%	

### Alcohol Use

Table 10 shows parental knowledge of alcohol consumption by H.O. level. Among those who drink beer without parental knowledge, 70 percent are in the high H.O. level, 25 percent are in the medium level, and only 5 percent are in the low level. Among those who drink beer with their parents' knowledge, 42 percent are in the high, 37 percent in the medium, and 21 percent in the low H.O. level. Overall 22 percent of the low H.O. level students are beer drinkers, 30 percent of the medium H.O. students are while 56 percent of the high level students drink beer. The chi square for these differences was significant at the .001 level.

Table 10.--Parental Knowledge of Alcohol Consumption by H.O. Level  
(Percent Across).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Beer</u>				
Don't drink it	37%(319)	44%(382)	19%(166)	$\chi^2 =$ 131.60
Drink, parents don't know	5%(3)	25%(16)	70%(44)	
Drink, parents know	21%(85)	37%(147)	42%(165)	DF = 4
Total	31%(407)	41%(545)	28%(375)	p<.001
<u>Wine</u>				
Don't drink it	37%(322)	42%(368)	21%(180)	$\chi^2 =$ 123.05
Drink, parents don't know	3%(2)	21%(13)	75%(46)	
Drink, parents know	21%(83)	41%(164)	38%(150)	DF = 4
Total	31%(407)	41%(545)	28%(376)	p<.001
<u>Whiskey + Liquor</u>				
Don't drink it	35%(373)	42%(453)	23%(246)	$\chi^2 =$ 123.60
Drink, parents don't know	7%(5)	15%(10)	78%(52)	
Drink, parents know	15%(29)	43%(82)	41%(78)	DF = 4
Total	31%(407)	41%(545)	28%(376)	p<.001





Among those who drink wine without parental knowledge, 75 percent are in the high H.O. level, 21 percent are in the medium level, and 3 percent are in the low level. Among those who drink wine with parental knowledge 38 percent are in the high, 41 percent in the medium, and 21 percent are in the low H.O. level. Overall 21 percent of the low level students are wine drinkers, 32 percent of the medium level students drink wine while 52 percent of the high level students drink wine.

Among those who drink whiskey and liquor without parental knowledge, 78 percent are in the high H.O. level, 15 percent in the medium level, and 7 percent are in the low level. Among those who drink these with parental knowledge, 41 percent are in the high, 43 percent in the medium, and 15 percent in the low H.O. levels. Overall 8 percent of the low H.O. level students drink whiskey or liquor, 17 percent of the medium level students do so, and 35 percent of the high level students drink. The chi square for the contingency table was significant at the .001 level.

### Theft

Table 11 presents several delinquency measures (theft, vandalism, fighting, and truancy) and police perception by H.O. level. Among those who have never stolen, 40 percent are in the low level, 40 percent are in the medium level, and 19 percent are in the high level



Table 11.--Delinquency and Police Perception by H.O. Level (Percent Across).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Theft</u>				
Never stole	40% (223)	40% (223)	19% (105)	$\chi^2 =$ 78.03 DF = 6 p<.001
Stole once	27% (96)	45% (159)	28% (97)	
Stole twice	19% (25)	43% (58)	38% (51)	
Stole three +	21% (62)	36% (105)	42% (123)	
Total	31% (406)	41% (545)	28% (376)	
<u>Vandalism</u>				
Never broke things	35% (173)	43% (212)	22% (106)	$\chi^2 =$ 48.63 DF = 6 p<.001
Broke things once	35% (141)	40% (163)	25% (104)	
Broke things twice	28% (53)	36% (70)	36% (69)	
Broke things three +	17% (40)	42% (100)	41% (97)	
Total	31% (407)	41% (545)	28% (376)	
<u>Fighting</u>				
Never fought	43% (69)	44% (70)	13% (20)	$\chi^2 =$ 56.20 DF = 6 p<.001
Fought once	41% (69)	43% (71)	16% (27)	
Fought twice	34% (60)	39% (68)	26% (46)	
Fought three +	25% (209)	41% (334)	34% (281)	
Total	31% (407)	41% (534)	28% (374)	
<u>Truancy</u>				
Never skipped school	35% (333)	43% (409)	21% (201)	$\chi^2 =$ 92.34 DF = 6 p<.001
Skipped school once	19% (34)	39% (69)	41% (72)	
Skipped school twice	25% (15)	36% (23)	41% (26)	
Skipped school three +	17% (24)	30% (43)	53% (77)	
Total	31% (406)	41% (544)	28% (376)	
<u>Police Perception</u>				
Don't think police are helpful	0% (0)	1% (6)	7% (28)	$\chi^2 =$ 61.95 DF = 4 p<.001
Think police are sometimes helpful	14% (57)	12% (63)	18% (68)	
Think police are always helpful	86% (350)	87% (476)	74% (276)	
Total	31% (407)	41% (545)	28% (375)	



of heterosexual orientation. Among those who have stolen things three or more times, 21 percent, 36 percent, and 42 percent are in the low, medium, and high H.O. levels, respectively. Fifty-five percent of the low level students have never stolen while 28 percent of the high level students have never stolen. The chi square for the contingency table was significant at the .001 level.

### Vandalism

Among those who have never broken anything belonging to someone else 35 percent are in the low level, 43 percent are in the medium level, while 22 percent are in the high H.O. level. Ten percent of the low H.O. level students have broken other's things three or more times, 18 percent of the medium level students have done this, while 26 percent of the high level students have done this. This chi square for this contingency table was significant at the .001 level.

### Fighting

Among those who have never fought, 43 percent are in the low level, 44 percent are in the medium, and 13 percent are in the high level of H.O. Among low level students 51 percent have fought three or more times while 62 percent of the middle and 75 percent of the high level H.O. students report fighting three or more times. The

chi square for the contingency table was significant at the .001 level.

### Truancy

Thirty-five percent of those who have never skipped school are in the low level, 44 percent are in the medium, and 21 percent are in the upper level of H.O. Six percent of the low H.O. level students have skipped school three or more times, 8 percent of the middle level students have done this while 20 percent of the high level students have done it. The chi square for this contingency table was significant at the .001 level.

### Police Perception

Zero percent, 1 percent, and 7 percent of the low, medium, and high H.O. level students respectively, felt that the police are not helpful while 86 percent, 87 percent, and 74 percent felt that they are always helpful. The chi square was significant at the .001 level.

### Hypothesis Two: Stress

Hypothesis two stated that Heterosexual Orientation would be negatively related to measures of stress. This hypothesis must be rejected. Table 12 presents the data on the depression indicators of stress by H.O. level.

Table 12.--Depression Indicators of Stress by H.O. Level.

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Suicidal Thoughts</u>				
Never thought of killing self	36% (320)	43% (381)	21% (190)	$\chi^2 =$ 71.38 DF = 4 p<.001
Have thought of killing self	20% (86)	38% (161)	42% (182)	
Total	31% (406)	41% (542)	28% (372)	
<u>Boredom</u>				
Not bored	31% (89)	38% (108)	30% (86)	$\chi^2 =$ 32.07 DF = 4 p<.001
Bored only sometimes	33% (284)	43% (376)	24% (213)	
Bored most of the time	20% (34)	35% (61)	45% (77)	
Total	31% (407)	41% (545)	28% (376)	
<u>Sadness</u>				
Not sad	31% (155)	38% (187)	31% (151)	$\chi^2 =$ 27.67 DF = 4 p<.001
Sad only sometimes	31% (237)	44% (334)	24% (185)	
Sad most of the time	19% (15)	30% (24)	51% (40)	
Total	31% (407)	41% (545)	28% (376)	
<u>Self-Concern</u>				
Don't care what happens to self	8% (4)	23% (12)	69% (36)	$\chi^2 =$ 69.36 DF = 4 p<.001
Sometimes cares what happens to self	24% (32)	32% (43)	44% (60)	
Cares what happens to self	33% (371)	43% (489)	25% (279)	
Total	31% (407)	41% (544)	28% (375)	
<u>Desires for Attention</u>				
Don't want more attention	37% (92)	34% (84)	29% (71)	$\chi^2 =$ 47.47 DF = 4 p<.001
Sometimes want more attention	34% (259)	43% (324)	23% (179)	
Want more attention	18% (56)	43% (136)	39% (125)	
Total	31% (407)	41% (544)	28% (375)	

### Suicidal Thoughts

Among those students who have thought of killing themselves, 20 percent are in the low, 38 percent in the middle, and 42 percent are in the high level of H.O. Twenty-one percent of all the low H.O. level students have thought of killing themselves, 30 percent of the middle level students reported such thoughts while 49 percent of the high level students reported them. The chi square for the contingency table was significant at the .001 level.

### Boredom

As can be seen in Table 11, while the percentages of those students claiming not to be bored are fairly similar across the three levels, the percentages of those students claiming to be bored vary across the levels. Eight percent of the low H.O. students are bored most of the time, 11 percent of the medium level students are bored to this extent while 20 percent of the high level students are. The chi square for this contingency table was significant at the .001 level.

### Sadness

Among those students who are sad most of the time, 19 percent are in the low H.O. level, 41 percent are in the medium level, and 51 percent are in the high level. The high H.O. level contains the highest percentages of



students who are not sad (40 percent) and who are sad most of the time (11 percent). This is possible since this level contains the smallest percentage of students who are sad only sometimes. While 11 percent of the high level students are sad most of the time, 4 percent of the medium and 4 percent of the low level students report this. The chi square for this contingency table was significant at the .001 level.

### Self-Concern

In regards to self-concern, 10 percent of the high H.O. level students do not care what happens to themselves while 1 percent and 2 percent of the low and middle level students do not care. Seventy-four percent of the high level students always care whereas 91 percent and 90 percent of the low and middle levels, respectively, always care. The chi square for this contingency table was significant at the .001 level.

High level students desired more attention than those at other levels. Thirty-three percent of the high level students wanted more attention while the corresponding percentages for the low and middle levels were 14 percent and 25 percent respectively. The chi square for this contingency table was significant at the .001 level.

### Physical Abuse From Parents

Table 13 shows the data for parental beating by sex and H.O. level and for overall H.O. level. The question asked if the student had ever been beaten so badly that he was ashamed to be seen by others. Seven percent of the low H.O. level students, 11 percent of the medium level, and 16 percent of the high level students said that they had been so beaten. The percentages having been beaten at each H.O. level are almost identical for boys and girls. The chi square for the overall contingency table was significant at the .001 level and the chi square for the sex by H.O. level table was significant at the .01 level.

### Ability to Communicate With Parents

Table 14 presents the data on communication with and perception of parents. Twenty-one percent of the low H.O. level students, 39 percent of the medium, and 40 percent of the high level students report they cannot talk to their parents about anything. Overall 12 percent of the students in the low H.O. level, 16 percent in the medium, and 24 percent in the high level report that they cannot talk to their parents about anything they want. The chi square for this contingency table was significant at the .001 level.



Table 13.--Parental Beating by Sex and H.O. Level.

H.O. Level	Sex					
	Overall		Boys		Girls	
	Had Not Been Badly Beaten by Parents	Had Been Badly Beaten by Parents	Had Not Been Badly Beaten by Parents	Had Been Badly Beaten by Parents	Had Not Been Badly Beaten by Parents	Had Been Badly Beaten by Parents
Low	93% (374)	7% (29)	93% 195	7% 14	92% 179	8% 15
Medium	89% 484	11% 58	89% 226	11% 28	90% 258	10% 30
High	84% 313	16% 61	83% 178	17% 36	84% 135	16% 25
Total	89% 1171	11% 148	88% 599	12% 78	89% 572	11% 70
Signifi- cance	$\chi^2 = 16.43$ DF = 2 p<.001	$\chi^2 = 16.71$ DF = 5 p<.01				

Table 14.--Communication With and Perception of Parents by H.O. Level  
(Percent Across).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>Community With Parents</u>				
Can't talk to parents about anything	21%(48)	39%(88)	40%(91)	$\chi^2 =$ 21.98
Sometimes can talk to about anything	33%(153)	41%(190)	25%(116)	
Can talk to parents about anything	32%(205)	42%(267)	26%(169)	DF = 4
Total	31%(406)	41%(545)	28%(376)	p<.001
<u>Perception of Parental Acceptance</u>				
Don't think parents glad they were born	11%(6)	35%(20)	54%(31)	$\chi^2 =$ 42.72
Sometimes think parents glad they were born	19%(35)	42%(75)	39%(70)	
Think parents glad were born	34%(365)	41%(449)	25%(275)	DF = 4
Total	31%(406)	41%(545)	28%(376)	p<.001
<u>Perceptions of Parental Congeniality</u>				
Parents don't do nice things for one another	21%(9)	38%(16)	40%(17)	$\chi^2 =$ 8.52
Parents sometimes do nice things for one another	28%(88)	40%(125)	33%(103)	
Parents do nice things for one another	32%(310)	42%(404)	26%(255)	DF = 4
Total	31%(407)	41%(545)	28%(375)	p<.10

### Perception of Parental Acceptance

Concerning perception of parental acceptance, 11 percent of the low, 35 percent of the medium, and 54 percent of the high H.O. level students do not think their parents are glad that they were born. One percent of the low level, 5 percent of the medium, and 8 percent of the high level students do not think their parents are glad that they were born. In similar fashion, 9 percent, 14 percent, and 19 percent sometimes think their parents are glad they were born. The chi square for this table was significant at the .001 level.

### Perception of Parental Congeniality

Regarding perception of parental congeniality, among those students who reported that their parents do not do nice things for one another, 21 percent are in the low, 38 percent in the medium, and 40 percent are in the high H.O. level. Overall 2 percent of the low, 3 percent of the medium, and 5 percent of the high level students report that their parents do not do nice things for each other while 76 percent, 74 percent, and 68 percent of these students, respectively, reported that their parents do do nice things for each other. The chi square for this contingency table did not reach statistical significance, however.

### Hypothesis Three: Scholastic Attitudes and Perceptions

Hypothesis three predicted there would be a positive relation between the level of H.O. and favorable attitudes toward school, teachers, and the perception of one's own intelligence. This hypothesis must also be rejected.

Table 15 presents the data on attitudes toward school by H.O. level. Among those who state they do not like school, 25 percent are in the low level, 28 percent are in the medium level while 47 percent are in the high level. The chi square for the contingency table was significant at the .001 level. Among those who do not like teachers, 19 percent are in the low level, 24 percent are in the medium level, while 57 percent are in the high level of H.O. Overall 5 percent of the low H.O. level students do not think teachers are nice while 4 percent of the middle and fifteen percent of the high level students reported this attitude. The chi square for the contingency table was significant at the .001 level. Twenty-six percent of the low H.O. level students felt they probably are not smart enough to finish college while 34 percent of the medium level and 41 percent of the high level students felt this way. The chi square for this contingency table was significant at the .05 level.

Table 15.--Scholastic Attitudes and Perceptions by H.O. Level (Percent Across).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	
<u>School Attitude</u>				
Don't like school	25%(40)	28%(45)	47%(74)	$\chi^2 =$ 30.64
Like school sometimes	32%(188)	42%(245)	26%(154)	
Like school	31%(179)	44%(255)	25%(148)	DF = 4
Total	31%(407)	41%(545)	28%(376)	
				p<.001
<u>Attitude Toward Teachers</u>				
Don't think teachers are nice	19%(19)	24%(24)	57%(56)	$\chi^2 =$ 45.57
Think teachers are nice sometimes	32%(260)	41%(334)	27%(224)	
Think teachers are nice	31%(128)	46%(187)	23%(95)	DF = 4
Total	31%(407)	41%(545)	28%(375)	
				p<.001
<u>Perception of Intelligence</u>				
Probably not smart enough to finish college	26%(26)	34%(34)	41%(41)	$\chi^2 =$ 9.58
Not sure if smart enough to finish college	30%(184)	42%(257)	29%(177)	
Probably smart enough to finish college	32%(197)	42%(254)	26%(158)	DF = 4
Total	31%(407)	41%(545)	28%(376)	
				p<.05
<u>College Orientation</u>				
Don't want to go to college	24%(25)	39%(41)	37%(38)	$\chi^2 =$ 9.45
Not sure if want go to college	29%(133)	41%(189)	31%(144)	
Want to go to college	33%(249)	42%(314)	25%(192)	DF = 4
Total	31%(407)	41%(544)	28%(374)	
				p<.10





#### Hypothesis Four: College Orientation

Hypothesis four stated that H.O. level will be positively related to college orientation. This hypothesis cannot be rejected since the chi square obtained corresponds to a probability level of only .10. However, the trend of the data presented in Table 11 is in the direction that would lead to rejection of this hypothesis also. Sixty-one percent of the low level students state that they want to go to college, 58 percent of the medium level students report this, and 51 percent of the high level students report this.

#### Hypothesis Five: Present and Desired Family Size

Hypothesis five stated that children who came from a large family (three or more siblings) would report that they would want to have large families themselves more frequently than those from smaller families. This hypothesis must be rejected. The correlation between the two items was .03.

#### Hypothesis Six: Marriage Orientation

Hypothesis six stated that H.O. level will be positively related to favorable attitudes toward marriage. This hypothesis is accepted. Table 16 shows the frequencies and percentages for marriage orientation for sex by H.O. level and for overall H.O. level. Sixty-one percent of the

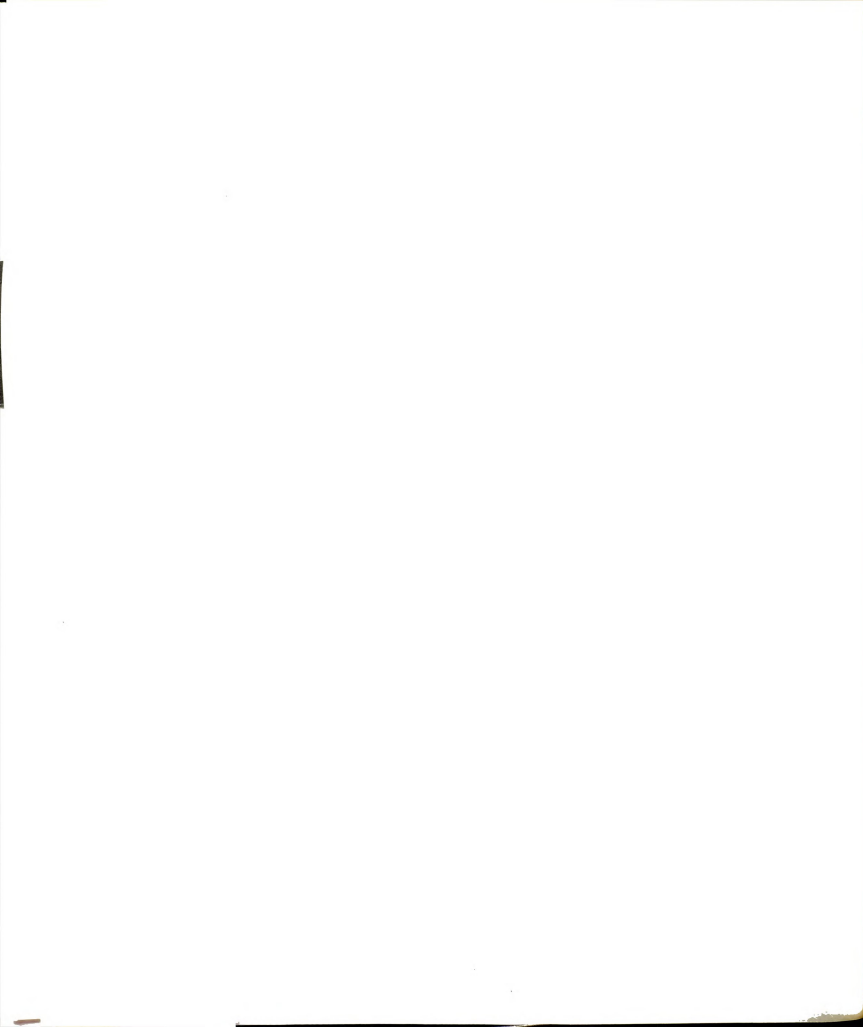


Table 16.--Marriage Orientation by Sex and H.O. Level (Percent Across Each Level by Sex).

Question: Do You Want to Get Married?	Not		Yes		No		Not Sure		Yes		Total
	No		Sure		No		Boys		Boys		
	Overall		Boys		Girls		Boys		Girls		
<u>Heterosexual Orientation</u>											
Low	18% (75)	45% (182)	37% (149)	28% (59)	8% (16)	47% (99)	42% (83)	24% (52)	49% (97)	31% (406)	
Medium	12% (64)	31% (167)	58% (313)	16% (41)	8% (23)	32% (83)	29% (84)	52% (132)	63% (181)	41% (544)	
High	13% (48)	26% (97)	61% (229)	18% (39)	6% (9)	26% (55)	26% (42)	56% (121)	67% (108)	28% (374)	
Total	14% (187)	34% (446)	52% (691)	20% (139)	7% (48)	35% (237)	33% (209)	45% (305)	60% (108)	100% (1324)	
Significance	$\chi^2 = 58.60$			$\chi^2 = 122.07$							
	DF = 4			DF = 10							
	p<.001			p<.001							

high level students want to get married, 58 percent of the medium level students desire this, while 37 percent of the low level students want to get married. The chi square for the contingency table was significant at the .001 level.

#### Hypothesis Seven: Differential Marriage Orientation by Sex

Hypothesis seven stated that boys would have a more negative orientation to marriage than would girls. This hypothesis is accepted. Overall, 57 percent of the girls and 45 percent of the boys were sure they wanted to get married. More girls at each level have favorable attitudes toward marriage than do boys at similar levels. Forty-nine percent, 63 percent, and 67 percent of the low, medium, and high H.O. level girls are favorably oriented toward marriage while the corresponding percentages among boys were 24 percent, 52 percent, and 56 percent. The chi square for the contingency table by sex was significant at the .001 level.

#### Comparison of Present and Previous Findings

Table 17 presents a comparison of Broderick's 1962 data and the present findings on four items of heterosexual orientation. The incidences of marriage orientation and dating experience were less in the present sample than in the previous sample while the incidences of having had an

Table 17.--Comparison of Broderick's 1962 Data and Present Study (In Percents).

Item	Broderick's Study (1962)		Present Study (1973)	
	Girls n=499	Boys n=530	Girls n=689	Boys n=645
Want to Marry	84	62	60	44
Had Opposite Sex Friend	71	56	79	73
Had Been in Love	51	47	56	59
Had Had a Date	22	24	16	19

opposite sex friend and having been in love were greater in the present than in the previous sample.

#### Students' Feelings About Questionnaire

Table 18 shows the percentages and frequencies by H.O. level of the students' feelings about answering the questionnaire. Forty-three percent of those students who were in the low H.O. level liked answering the questions while 50 percent of the medium H.O. level and 56 percent of the high level students liked answering them. While more high H.O. level students liked answering the questions than did those at other levels more of those also disliked answering them. This was possible because of the "not sure" responses which was lowest for the high H.O. level. The chi square for the contingency table was significant at the .001 level.

Table 18.--Students' Feelings About Questionnaire by H.O. Level  
(Percent Down).

Statement of the Questions	Heterosexual Orientation Level			Signifi- cance
	Low	Medium	High	

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How Do You Feel About Answering These Questions?				
Liked answering them	43%(174)	50%(274)	56%(211)	$\chi^2 = 33.34$ DF = 4 p<.001
Not sure	41%(166)	36%(196)	23%(87)	
Didn't like answering them	16%(66)	14%(74)	21%(78)	
Total	100%(406)	100%(544)	100%(376)	

#### Guttman Scales of Heterosexual Orientation

Four questions in the present questionnaire (numbers 39, 41, 45, and 46) were part of the Guttman scale that Broderick (1968) reported. Broderick found that these questions with one additional one formed a Guttman scale which yielded a satisfactory coefficient of reproducibility when applied to samples of ten to twelve-year-old boys and girls in Pennsylvania and Missouri. The question that was in his scale that was not in the present study concerned the child's preference for a movie companion. The child was to select from three pictures which situation he would prefer. One picture showed a child alone, one with a same sex companion, and one with an opposite sex companion. The response was scored

positively if the child selected the opposite sex companion situation as the preferred one. The present questionnaire did not include any pictures so data is lacking on this item. This in no way affects the test of the remaining items however. By removing an item (and the errors associated with that item) the coefficient of reproducibility should rise.

The coefficient of reproductibility for the present study for the four remaining items was .92. This is considered an acceptable coefficient and is essentially the same obtained by Broderick for his five item scale. It should be pointed out, however, that in order to use the question concerning marriage orientation a scoring procedure different from Broderick's had to be used. Broderick scored a "not sure" response as negative. To have done so on the present data would have meant that this item could not possibly have been the first item in the scale since more students would have responded positively to the second item concerning having had an opposite sex friend. As previously presented in Table 4, 52 percent of the students in the present study answered the question concerning marriage positively, 14 percent negatively, and 33 percent were not sure. Since on the question concerning desired family size most of the children who had responded "not sure" to the earlier question on marriage orientation now chose an option that required marriage, it seemed to make theoretical sense to include the "not sure" responses with



the "yes" responses for scoring purposes. This was done for a number of scale analyses and then the "not sure" responses were considered with the "no" responses for additional analyses.

Table 19 presents for this scale and all the other scales developed, the items in the scale, the percent of the sample responding positively to each item, and the scale statistics. The first ten scales yielded statistics that are considered acceptable for a true Guttman scale. Scale 11 and 12 yielded coefficients that were not considered acceptable. Scales 9 and 10 were computed for girls only since when boys alone or the total sample were considered the percent positive response to the items changed in such a way as to make scaling these items impossible.

Scale 2 replaced "had been in love" in Scale 1 with "had kissed" and the same coefficient of reproducibility (.92) was obtained. Scale 3 replaced "had date" in Scale 1 with "had kissed and hugged" and resulted in a similar coefficient of reproductibility. Scale 4 replaced "had been in love" in Scale 3 with "had kissed." Scale 5 added "had date" to the four items in Scale 4. Scale 6 introduced a new item: "had gone steady." Scales 7 and 8 were rearrangements of items used in prior scales. Scale 9 was computed for girls only and extended the sequence to six items. Scale 10 extended the sequence for girls to seven items. It was not possible to construct a seven



Table 19.--Guttman Scales of Heterosexual Orientations.

Scale Number	Subjects Used in Analysis	Scale Item	Percent Positive Response	Scale Statistics			
				Coefficient of Reproducibility	Minimum Marginal Reproducibility	Percent Improvement	Coefficient of Marginal Scalability
1	All	Marriage Oriented	86				
		Had Girl/Boy Friend	77				
		Had Been in Love	58	.92	.75	.17	.68
		Had Date	19				
2	All	Marriage Oriented	86				
		Had Girl/Boy Friend	77				
		Had Kissed	55	.92	.75	.17	.70
		Had Date	19				
3	All	Marriage Oriented	86				
		Had Girl/Boy Friend	77				
		Had Been in Love	58	.91	.73	.18	.68
		Had Kissed and Hugged	26				
4	All	Marriage Oriented	86				
		Had Girl/Boy Friend	77				
		Had Kissed	55	.92	.73	.19	.72
		Had Kissed and Hugged	26				
5	All	Marriage Oriented	86				
		Had Girl/Boy Friend	77				
		Had Kissed	55	.91	.74	.17	.67
		Had Kissed and Hugged	26				
6	All	Had Date	19				
		Had Girl/Boy Friend	77				
		Had Kissed	55	.92	.71	.21	.74
		Had Gone Steady	26				
7	All	Had Date	19				
		Had Girl/Boy Friend	77				
		Had Kissed	55	.93	.71	.22	.77
		Had Kissed and Hugged	26				
8	All	Had Date	19				
		Had Girl/Boy Friend	77				
		Had Been in Love	58	.93	.72	.21	.75
		Had Gone Steady	26				



Table 19.--Continued.

Scale Number	Subjects Used in Analysis	Scale Item	Percent Positive Response	Scale Statistics			
				Coefficient of Reproducibility	Minimum Marginal Reproducibility	Percent Improvement	Coefficient of Scalability
9	Girls Only	Marriage Oriented	94				
		Had Girl/Boy Friend	83				
		Had Been in Love	77				
		Had Gone Steady	43	.93	.80	.13	.66
		Had Date	21				
10	Girls Only	Had Asked for Date	7				
		Marriage Oriented	94				
		Had Girl/Boy Friend	83				
		Had Kissed	77				
		Had Been Asked for Date	72	.92	.79	.13	.61
11*	All	Had Gone Steady	45				
		Had Date	21				
		Had Asked for Date	7				
		Had Girl/Boy Friend	81				
		Marriage Oriented	74	.87	.71	.16	.57
12*	All	Had Gone Steady	48				
		Had Date	23				
		Had Girl/Boy Friend	81				
		Marriage Oriented	73				
		Had Kissed and Hugged	48	.87	.71	.16	.56
12*	All	Had Date	23				

\*In Scales 11 and 12 a "not sure" response to the marriage orientation question was counted as a negative response while in all others it was counted as a positive response.



item scale for boys. Scales 11 and 12 a "not sure" response to the marriage orientation question was scored as a "no" response whereas in the others it was scored as a "yes" response. This method of scoring made the use of marriage orientation as a scale item impossible since coefficients of reproducibility were below the acceptable limit.





## CHAPTER VI

### DISCUSSION AND CONCLUSIONS

#### Nonconformity

It was hypothesized that heterosexual orientation would be negatively related to measures of nonconformity when, in fact, just the opposite relationship was found. This suggests that preadolescent heterosexual orientation is not a normative behavior in the community studied. According to the definition of normative behavior proposed earlier (at least 50 percent of the population having engaged in the behavior) the only normative heterosexual behaviors at the preadolescent stage are: having had an opposite sex friend, having been in love, and having kissed or been kissed. It was necessary to respond positively to more than three items in the H.O. index in order to receive a score in the high H.O. level. Therefore the students who were high in heterosexual orientation had engaged in at least one non-normative item regarding heterosexual orientation.



It is significant that three behaviors are normative for these preadolescents. This needs to be recognized in theories of heterosexual development and indicates that many textbooks need to revise their concept of the "homosexual" preadolescent period. Behaviors such as necking, going steady, and dating are non-normative despite the fact that many popular press articles seem to indicate that most preadolescents are engaging in these behaviors. For such a child to engage in these behaviors he or she must apparently go against parental and community expectations. The child who does this is more likely to engage in other nonconforming behaviors such as theft, vandalism, and drug usage. Perhaps we are in a transition period that is seeing increasing acceptance of dating and necking behavior for preadolescents. Many students who were high on heterosexual orientation were not engaged in the behaviors that traditionally are thought of as nonconforming but most of the children engaging in these traditionally nonconformist behaviors were high in heterosexual orientation.

It would have been interesting if the present study had been able to identify whether the student came from a middle class or working class home. It is possible that heterosexual orientation is viewed differently by the different social classes and that this leads to differential implications for preadolescent heterosexual orientation. The author would speculate that more of the



students who were high on heterosexual orientation but did not engage in other nonconforming behaviors might have come more from middle class as opposed to working class homes, since parents in the middle class probably view this involvement as a more desirable experience for their children than do working class parents. Further research could clarify this but from a methodological point of view it is difficult to collect information on social status from preadolescent children. The fact that the questionnaire were anonymous prevents checking on family background even if this were available to the school system. In summary, the hypothesis that the highly heterosexual oriented preadolescent would be a conformist had to be rejected.

### Stress

It was hypothesized that heterosexual orientation would be negatively related to measures of stress, but the opposite relationship was found. The fact that heterosexual orientation was related to nonconformity helps explain why heterosexual orientation and stress are related. The nonconformist receives less support from family and community and would therefore be more likely to experience stress. Since behaviors like dating, necking, and going steady appear to represent nonconformity in this community it is likely that the student under stress who wished to be a nonconformist would turn to these behaviors in addition



to those traditionally thought of as nonconformist such as drug usage and delinquency.

Participation in a nonconformist behavior could, in itself, generate stress for the preadolescent. For example, if the parents disapproved of the child participating in dating and the child does it anyway, this is likely to damage the parent-child relationship which is likely to produce stress. It would appear possible therefore, that participation in these heterosexual activities could be a reaction to the stress the child is under or that participation in them leads to stress. It is likely that both of these things could operate at the same time. The child under stress who participates in certain heterosexual behaviors may be under additional stress and find himself in an escalating stress cycle.

Many theorists of the development of sexual expression and the developmental aspects of sex-role behavior have emphasized the importance of family variables, especially in the first few years of life. It would seem significant then that those children who were high on heterosexual orientation had poorer relations with their parents. The item concerning parental beating indicated that more children in the high H.O. level had been beaten badly by their parents. There is a possibility that boys would be less embarrassed by signs of beating since if they appeared proud of their bruises and cuts they would be seen by their peers as "tough." That this is probably not an





important factor is indicated by the fact that the girls at each level report similar feelings of embarrassment over parental beating as do the boys. The children in the low H.O. level appear to give their parents less reason to beat them. They fight less, use drugs (including cigarettes and alcohol) less, and are not involved with the opposite sex. They are probably much more under their parents' control than are students in the high H.O. level. Depending on one's point of view they are more highly socialized, more bonded to the parents, more inhibited, or perhaps have identified with their parents more than have students at the medium or high H.O. levels.

More low H.O. level students report that they can talk to their parents about anything, indicating better rapport with their parents. This is attested to by the fact that more of them felt that their parents were glad that they were born. Children in the high H.O. level seem to be less subject to parental control than do those at the low or medium levels but it would be a mistake to picture all of these high H.O. level students as having poor relationships with their parents. Most of them have not been beaten by their parents, can talk to them about anything at least sometimes, and feel that their parents do nice things for each other.

An indication that at least some of the high H.O. level students may be under stress is seen in their use of aspirin. In the week previous to the administration of the



questionnaire almost half of the high H.O. level students had taken aspirin whereas only one-third of the low H.O. level students had done so. One could theorize that it was being taken for colds, headaches, and other legitimate uses, but this does not explain the greater use in the middle and high H.O. levels in contrast with the low level. In addition, of those students who had used it without their parents' knowledge, 17 percent were in the low H.O. level, 38 percent in the medium, and 46 percent in the high H.O. level. It could be an additional indication that the high H.O. level children are less bonded to their parents. When these youngsters need an aspirin they take it without parental consultation whereas the low H.O. level students feel the need for parental approval. The high level of aspirin use of the students in the middle and high H.O. levels may represent attempts to relieve tension. This seems especially likely since they were higher on measures of stress than were the children in the low H.O. level. Perhaps they may be more inclined to accept the messages from the mass media which extol the virtues of various drugs as aids in coping with tension.

#### School Attitudes

It was hypothesized that heterosexual orientation would be related to favorable attitudes toward school but the opposite was found. Since heterosexual orientation was linked to nonconformity it is logical that the child high



on heterosexual orientation (who is basically a nonconformist) does not like school as well as students who were lower in heterosexual orientation. That the students high in heterosexual orientation had less confidence in their own intelligence is another indication that they may be under more stress and have a lower self-concept than the more conforming students. It is likely that if the school does encourage heterosexual orientation it encourages only those behaviors that are conformist for this population (opposite sex friend, love, and kissing) rather than those associated with high heterosexual orientation.

It also follows that the student who is high on heterosexual orientation would be less oriented toward college. The trend of the data was in this direction although it did not reach statistical significance. The student who is high on heterosexual orientation currently has less favorable attitudes toward school and has more doubts about his intelligence. He is also under more stress and is engaging in more nonconformist behavior. Under these circumstances it would indeed be unusual if he were more college oriented than his counterpart who is low in heterosexual orientation.

#### Family Size

It was hypothesized that present family size would be related to desired family size, but no relationship was found between these two variables. This does not necessarily



mean that when the child reaches adulthood his family size preference will not change. Another factor which might account for the lack of relationship between present and desired family size may be due to the fact that the pre-adolescent's thoughts concerning his family of procreation have not as yet crystallized.

#### Marriage Orientation

It was hypothesized that heterosexual orientation would be related to favorable attitudes toward marriage and that girls would have more favorable attitudes toward marriage than boys. Both of these were accepted. Even though the students in the present study were not as marriage oriented as those in previous research they were at least as heterosexually oriented as those in previous research. While marriage orientation was related to heterosexual orientation it was not necessary nor sufficient to the development of heterosexual orientation. In other words, many students who were high in heterosexual orientation did not want to get married, while approximately half of the girls who were low in heterosexual orientation wanted to get married. About one-quarter of the low level boys were positively oriented toward marriage. The fact that boys were less marriage oriented than girls could partially explain why many people have assumed that males are less interested in the opposite sex than are girls. The data clearly indicate that males are not less heterosexually





oriented than the females despite their being less marriage oriented. If one assumes that marriage orientation and heterosexual orientation are one and the same, this mistake could easily be made. Similarly, if one assumes that marriage orientation is necessary before further heterosexual orientation can take place, the same erroneous conclusion would be reached. These results cast some doubt on Broderick and Rowe's assertion that children had to first view marriage as desirable in order to relate to the opposite sex:

. . . it would appear that, until this fundamental step is achieved, further progress in relating socially to the opposite sex is inhibited during preadolescence (Broderick and Rowe, 1968, p. 100).

If a "not sure" response is considered to be indicative of a positive orientation toward marriage (and a rationale for so doing was presented in the previous chapter) then indeed it does appear to be the first step in heterosexual orientation for most children. No item concerning heterosexual orientation received a higher positive response. It would seem that a larger percentage of students in this sample are not completely sure if they want to marry than were students in the earlier study. Precise comparisons with the earlier study are impossible, since the earlier study did not report the percentages of students who said they were "not sure" versus an outright "no" response.



Broderick and Rowe's assertion was that a boy or girl had to view marriage as "an attractive element" in his future before he could further relate to the opposite sex (Broderick and Rowe, 1968, p. 100). This may be an oversimplification. It may only be necessary to see it as part of one's distant future without immediately seeing it as attractive. This could explain the different responses to the questions on marriage orientation and the one on desired family size. The term "recognition of the heterosexual nature of adult relationships" might be used in preference to favorable marriage orientation. Many students had not yet decided for sure that they wanted to marry. However, when confronted by a question that asked them how many children they wanted, the majority (82 percent) had little difficulty in seeing themselves as married.

Marriage orientation may not really be necessary for further heterosexual orientation. Rather it may be a reflection of socialization in a society where over 90 percent of adults marry at one time or another. If an item receives positive agreement from a large percentage of a population it may not represent a first step in sequential development. The findings of this study demonstrate that marriage orientation is not essential for the development of heterosexual orientation. Broderick himself seemed to recognize this possibility of misinterpretation when he



stated in a Guttman Scale Analysis computer program description:

The proportion of the sample responding positively to each item ranges from 20 percent to 80 percent. More extreme percents will give spuriously high coefficients of reproducibility (Broderick, 1964, p. 1).

#### Opposite Sex Friends, Love, and Dating

In this study the heterosexual orientation item that received the highest positive response was that item dealing with having an opposite sex friend. For girls, a small increase in heterosexual friendship was observed when comparing data from this study and the one done approximately a decade earlier (Broderick and Rowe, 1968). However, a rather large increase in heterosexual friendship was shown for the boys. The percentage of boys and girls reporting these heterosexual relationships was fairly similar in this study for the older children. The percentages among the present sample of nine year olds who had an opposite sex friend was 60 percent for the boys and 72 percent for the girls. These percentages are as large as the percentages reported by Broderick and Rowe for their entire sample of ten to twelve year olds. The trend toward earlier heterosexual involvement appears to have continued during the last decade. By age nine a majority of both sexes report having had an opposite sex friend.

It is possible that many of the students who reported that they had a boyfriend or girlfriend did not

define that relationship as a romantic one. Even though the terms boyfriend and girlfriend seem to have a romantic connotation there is still some ambiguity involved. The data on having been in love offer some help in clarifying this.

Only 57 percent of the students reported that they have been in love compared to 76 percent who had an opposite sex friend. This obviously means that some of the boyfriends and girlfriends that the students had were not perceived in terms of a love relationship. It is important to note that the majority of students at each age level report having been in love. This clearly seems to discredit the notion that this age period is a "latency" period where there is no favorable interest in the opposite sex.

It is interesting to note that at ages ten and eleven plus a slightly higher percentage of boys report having been in love than do the girls. While the percentage differences are small they suggest that boys are at least equal to the girls in their love interest. Again this seems to discredit those theories that suggest that males are at least two years behind girls in romantic interests.

Somewhat fewer students in the present study had dated than had those students in Broderick and Rowe's earlier research. There apparently has been no large increase in this behavior over the last decade. It is interesting to note that 23 percent of the eleven plus year



old boys say they have been asked for a date at least once. While only 5 percent of the eleven plus girls say they have asked for a date. It is not clear who asked these boys if it was not the girls in this sample. It is unlikely older girls were asking these younger boys for a date. There is a cultural proscription against the female asking the male for a date. This is reinforced by the fact that eleven year old girls are likely to be taller and more mature than their eleven year old male counterparts. It is possible that the boys interpreted a "date" differently than did the girls. Being invited to a girl's birthday party for example, could conceivably be interpreted as a date by some boys whereas the girl may not have so defined it.

#### Kissing and Necking

It is possible that one may have been in love or be in love without any actual interaction with the object of one's love. In this regard it is interesting to examine the data on kissing behavior. Fifty-four percent of the students report that they have kissed a member of the opposite sex. This is a very similar percentage to that found for those students claiming to have been in love. It is possible that some of this kissing behavior took place in kissing games at parties and not in a romantic context with one's girlfriend or boyfriend. It is also possible that the games could allow one to express genuine





affection in a "safe" context. In 1902 Bell commented on kissing games:

The kiss is not the frank love kiss given and received as such, but one called for by the rules of the game. This makes the kissing relatively impersonal and enables the young lovers thoroughly to enjoy the love communication without the awkward expression that would come to them if the expression were not thus long-circuited through the game. The charm of the whole thing is in the fact that under the guise of ceremony love has its way (p. 339)

Over a decade ago Time magazine in commenting on the increasing precocity of eight to twelve year olds noted a new kissing game:

Preteens in Los Angeles have developed a modern version of the postoffice and spin-the-bottle kissing games. They call it "Seven Minutes of Heaven (or Hell)." The boy takes the girl who is "it" into a closet or other room and, depending on his inclinations, kisses her (Heaven) or hits her (Hell) for seven minutes (p. 68).

Whatever the reasons for kissing, it seems to be either a concomitant or precursor of more advanced heterosexual orientation. It is quite possible that it in itself accelerates more advanced heterosexual association and behavior. That many of the students have no further heterosexual behavior beyond kissing is evident from the data on kissing and hugging. Twenty-six percent of the students report having kissed and hugged a lot. At each age a higher percentage of boys have done this than have girls. The wording used in the questionnaire (have you ever kissed and hugged a boy/girl a lot who is not in your family) is essentially the definition of necking. Sixty-five percent of the students in the high school sample had

engaged in this behavior (Vener, Stewart, and Hager, 1972, p. 698). That study suggested that holding hands, holding arm around or being held, and kissing represent a common phase of experience. While the present study has no data on holding hands or being held in one's arms it is likely that the percentages would be similar to the figures for kissing behavior. A large difference was observed between kissing behavior (54 percent) and kissing and hugging (26 percent).

Because of the nature of the division into the three levels almost no student engaging in either kissing or kissing and hugging was classified in the low level. It is unclear why ten year olds report lower rates than either the nine year olds or the eleven plus year olds. Changing social conditions could possibly be influencing the results. Vener and Steward (1974) found significant changes in adolescent sexual behavior between 1970 and 1973 in this same community. The "new morality" may be filtering down to the pre-teens and, in effect, speeding up the heterosexual orientation process. Possibly the younger children interpret the phase "kissed and hugged a lot" differently than do the older children. The important point here is that the majority of the high level students have engaged in this behavior while almost none of the low level students have and a minority of the middle level students have. Proceeding from "kissing" to "kissing and hugging a lot" is a rather large step made largely by

those in the high H.O. level. Kissing is probably sanctioned as an appropriate activity for the pre-teens whereas "kissing and hugging a lot" is not.

Approximately two-thirds of middle level students have kissed. Yet these middle level students were not engaged in many of the behaviors already reported (e.g., drinking, drug usage, cigarette smoking) to nearly the extent that high level students were. If one breaks away from norms in other areas of behavior, he or she is likely to break away from the norms of appropriate heterosexual behavior. This is in agreement with the large number of sociological studies of adolescents that find precocious sexual activity associated with delinquency.

#### Developmental Sequence

From the Guttman scales of heterosexual orientation that were derived, it appears that there are definite developmental sequences for this sample of preadolescent children. Marriage orientation appears to be the earliest heterosexual item to develop if we consider a "not sure" response to be indicative of marriage orientation. If we do not make this assumption it is not at all clear where and how marriage orientation fits into the developmental sequence.

The next event in the sequence is the selecting of a member of the opposite sex to be one's boyfriend or girlfriend. It is not clear how children classify someone

as being a boyfriend or girlfriend. How does a relationship with an opposite sex friend differ from one with a same sex friend? This would be an interesting distinction to pursue through interviews.

Two things appear to occur simultaneously in the next developmental sequence. The child feels he has been in love with a member of the opposite sex and has also kissed someone of the opposite sex. Either item worked equally as well as the third step in Guttman scaling. Here again interview data could help establish the relationship of these two items. A child who feels he is in love may soon experiment with kissing or the initiation of kissing could lead the child to believe he is in love.

Again two things appear in the next phase of the sequence. The child reports that he has "gone steady" and has "kissed and hugged a lot." Since these things take place, for the most part, before actual dating has begun, it is probable that going steady means thinking that some member of the opposite sex is rather special. Interestingly enough, this could easily take place without the recipient of this special consideration being aware of it. The kissing and hugging as well as kissing is likely to have taken place in the form of games in a group situation such as birthday parties, since formal dating, and the privacy it affords, has not been engaged in very much as yet.

All this activity and orientation has prepared the child to view the opposite sex as someone to relate to in a



special social event known as the date. This indeed is the next behavior to take place developmentally. This would seem to discredit those theories that see dating as the mechanism where a strange, feared member of the opposite sex is finally perceived as someone who can be gradually accepted and finally, liked and loved. The favorable orientation toward the opposite sex develops before formal dating begins. This may not be true for those children who are low in heterosexual orientation and are socially pressured into dating.

The data indicate that girls are asked out for a date at about the same time kissing starts. Typically, there is a time lag between these events and when she goes on her first date.

Those children who are low in terms of heterosexual orientation may short-circuit this sequence at adolescence. The pressure to date may force some of them to date even if they have not had an opposite sex friend, kissed, been in love, gone steady, or kissed and hugged. It is possible that establishing these social-emotional involvements in the preadolescent stage makes it easier to relate to the opposite sex on a physical basis and also socially-emotionally after puberty. It seems likely that those preadolescents children who are socially-emotionally involved with the opposite sex will not need much pressure to participate in adolescent dating activities and will adjust to them more easily than those who have to attempt





dating without this social-emotional heterosexual orientation.

Broderick (1968) speculated that development may be described in terms of movement on two axes described by Parsons. There is movement on the particularistic-universalistic axis toward the particularistic. The desire to some day marry someone of the opposite sex is followed by having a specific opposite sex friend. This is followed by being in love with the friend, and finally, interacting with the person in a dating situation. Movement is seen on the diffuse-specific axis toward the specific. For example, the diffuse concept of wanting to have a girlfriend becomes more specific when someone is selected for the role.

A study of the Guttman scales seems to indicate that the child is progressing along two continuums. One is overt physical involvement between the sexes and the other is a social-emotional continuum. The physical involvement continuum very probably contains hand holding, kissing, kissing and hugging (necking), petting, and intercourse in that order (Vener, Stewart, 1972). The social-emotional involvement continuum probably contains recognition of the heterosexual nature of adult relationships (marriage orientation), having a particular opposite sex friend, being in love, going steady, and having a date in that order.

Advancement on one continuum usually is accompanied by an advancement on the other so that most children who

have been in love report that they have kissed. One could precede on either continuum without a corresponding advancement on the other and yet there are social pressures to advance on both. If a girl were to say she was in love with a boy and yet refuse to kiss him she would probably get little support from her peer group, most of whom would be engaging in kissing behavior themselves.

Advancement along the social-emotional involvement continuum is more rapid initially than movement along the physical involvement continuum. The majority of nine year olds have recognized the heterosexual nature of adult relationships, have had an opposite sex friend, and have been in love. Among physical activities a small majority (53 percent) of the nine year old girls sampled have kissed while a minority (45 percent) of boys have done so. Early advancement along the social-emotional involvement continuum probably facilitates advancement along the physical involvement continuum. This likely is the reason many parents and others concerned with children decry the attempts being made to socialize children heterosexually at earlier ages. Some of the popular press articles cited seemed to suggest the notion that physical activities take place earlier for children who were encouraged to interact socially with the opposite sex. This is consistent with research studies that show that early dating is correlated with early marriage and subsequent marital instability. However, it has been suggested that it is not the age at



which dating begins that is crucial but the length of time spent in the dating process (Bayer, 1968). In this regard dating is seen as an educational process that allows one to interact with members of the opposite sex and to acquire skills in interpersonal relations that will presumably lead to better mate selection.

In this context preadolescent heterosexual orientation can be seen as a positive force. It could lead to more open and meaningful dating relationships and reduce some of the phoniness and competitiveness that has been associated with dating in prior generations (Waller, 1937). On the other hand, early involvement on the physical involvement continuum may lead to higher rates of premarital intercourse and to early marriage.

An important point is that one may be fairly involved with the opposite sex in a social-emotional way and not be very involved on the physical involvement continuum. Probably much of the support of the preadolescent latency concept has come from just examining physical involvement at this age while failing to recognize that there can be, and in fact is, much orientation and involvement in a social-emotional way despite little physical involvement. It is possible that relating to the opposite sex fosters the child's independence from his parents. This has both positive and negative possibilities at the preadolescent stage. Certainly those children who participated in delinquent acts were most independent of

their parents (and of society's rules) and were high on heterosexual orientation. It is likely that both their delinquent behavior and their high heterosexual orientation result from breaking away from parental control. That high heterosexual orientation, per se, does not necessarily result in delinquent behavior is clear from the fact that while most children who engaged in delinquent acts were high on heterosexual orientation, most children who were high on heterosexual orientation did not commit delinquent acts.

Knowing what the general developmental sequence is does not explain why and at what rate movement from one step to another in the continuum will take place. Hardy (1964) has suggested an appetitional theory of sexual motivation that theorizes cultural and social factors are of more importance than innate biological drives. Hand holding produces an emotional response because of the learned symbolic significance of doing this with what society says is an appropriate partner. This creates an appetite for additional hand holding and as this loses some of its power to seem unique and exciting it stimulates the appetite for more advanced behaviors. These initial behaviors can take place without any sexual connotation.

Other motives may be involved, of course, but the point is that initial participation in hand holding and further romantic activities generally originates in nonsexual motives, and further, that the positive affect arising from the activity serves to strengthen motivation for it (Hardy, 1964, p. 10).

When true sexual arousal does enter, the activities which took place without any sexual connotation now act as cues leading to sexual arousal.

If this theory is in fact correct, it would suggest to the writer that the late dater who has not participated in the "presexual" activities would not be as easily sexually aroused as those children who had engaged in these behaviors during the preadolescent period. This would have implications for not encouraging the initial behavior on the physical involvement continuum at earlier ages if one wished to limit adolescent sexual behavior. The recent increase in adolescent sexual behavior may have had its basis on increased preadolescent participation in heterosexual behavior.

Another theory is that there is some guilt felt at any point on the continuum and that if the behavior is maintained despite the guilt, the guilt will be reduced over time and facilitate progress to the next behavior on the continuum where the process will be repeated (Reiss, 1970). This is consistent with a cultural view of sexual development. If a society is accepting of a particular behavior there would be less guilt generated and more rapid progress along the continuums of heterosexual orientation. This seems to be verified by anthropological studies of different societies (Mead, 1950).

Early participation on the social-emotional involvement continuum in terms of expressing love appears

to facilitate participation on the physical involvement continuum.

Love experiences is one of the best predictors of which females will have premarital coitus (Reiss, 1970, p. 84).

Girls who fell in love often (four or more times) before the age of 12 tended to fall in love often (three or more time) between 12 and 18; to want to fondle and kiss the male they most love; . . . (Ellis, 1949, p. 11).

### Suggestions for Further Research

This study represents an initial step in examining the nature of preadolescent heterosexual orientation. It is felt that there are many more avenues to explore and several different methods that could be employed. Interview data could likely lead to insights not gained by examining the frequencies and percentages in contingency tables. For example, how do these children describe the love they feel they have had for an opposite sex friend? What were the motivations to date the first time? Where they at ease or apprehensive? How did they learn to kiss? Why didn't they tell their parents about drinking beer or taking aspirin? What was bothering them when they thought of killing themselves? How do they feel about their personal attractiveness to the opposite sex? Why were the daters dating and the non-daters not?

Little is known about how effective questionnaires are with a preadolescent population. Ellis (1947) concluded that the questionnaire was as effective as the





interview in studying love relationships of women college students. It was even more effective than the interview in eliciting more self-revelatory data when questions had a high amount of ego-involvement. In the present study the data show a consistency with respect to the three H.O. levels. Therefore it would seem that the students had answered the questions carefully and with candor.

Longitudinal research can give a better picture of individual developmental trends. It is felt much useful information could be gained by following individual children from the early preadolescent stage through adolescence and into young adult life. Is high heterosexual orientation at the preadolescent stage related to family and marital success or failure? Are there levels of heterosexual orientation that seem to lead to optimal success later in life? What is the fate of those children who are very low in heterosexual orientation?

Longitudinal studies have the advantage of eliminating the effects of cohorts that have different experiences influencing the interpretation of cross-sectional research done with different age groups. This is especially important in the area of heterosexual interaction and sexuality.

Much could be gained by studying children in the first three grades of school. The majority of the present fourth through sixth grade sample reports having had an opposite sex friend, having been in love, and having kissed



or been kissed. It would be useful to know when these behaviors appear for the first time. Does high heterosexual orientation at the early childhood stage have different correlates and consequences than it does at the preadolescent stage?

Comparative data from different social classes is needed. Would conclusions from the present sample hold for lower class children or upper class children? There are likely also to be racial differences. There is some evidence that heterosexual orientation is quite different among an urban black population, especially for the males (Broderick, 1965). One study found considerable differences in heterosexual friendship choice between different socioeconomic levels (Kanous, et al., 1962). It is likely there are also geographic differences. Studies of adolescent dating and sexual behavior have reported differences between southern, eastern, midwestern, and western sections of the United States (Packard, 1968).

The development and standardization of research instruments could help in detecting true differences. Most researchers have devised their own instruments for their own use--never to be used again. Strauss (1969, p. 3) has commented on the importance of cumulative use of research instruments to permit their standardization and to determine their limits and correlates. He felt that this is especially important when dealing with the

relatively intangible variables commonly found in research on the family.

It would be helpful to collect information from the children's parents. In this way one could determine the effects of the parents' efforts to encourage or discourage their child's participation in heterosexual activities. Some parents are likely to feel social skills are more important for their children than will other parents. In addition, one could investigate the age at which the parents began to date to determine if it is related to the age at which their children begin to relate to the opposite sex. It would seem plausible that if the parents began heterosexual interaction early they would view this as more appropriate for their own children than those parents who began their interaction at a later stage.



## CHAPTER VII

### SUMMARY

This study attempted to provide some insight into the heterosexual orientation during the preadolescent period. There has been a paucity of substantive research. Much current thinking still conceptualizes this age period as a time of "latency" where the sexes show little interest in each other.

This study examined the data collected employing a fifty-five item forced-choice questionnaire of 1,334 fourth, fifth, and sixth grade students in a west shore Michigan community. A scale of heterosexual orientation (H.O.) was developed from eight items in the questionnaire. Respondents were then grouped into low, medium, or high heterosexual orientation levels and the remaining items in the questionnaire were analyzed in terms of these three levels. The data analysis procedures were by gender, age, and heterosexual orientation. The chi square statistic was computed for all contingency tables. Inter-item correlations were computed. Guttman scales were derived



from the heterosexual orientation items and marriage orientation.

Some of the main findings were:

1. For many children the preadolescent period is not a time of latency in terms of orientation toward the opposite sex. The majority of all subjects had had an opposite sex friend, had been in love, and had kissed or been kissed by a member of the opposite sex. Substantial percentages of students had participated in addition behaviors that are considered more advanced in terms of heterosexual orientation--i.e., going steady, necking, and dating.
2. It was found that heterosexual orientation was associated with such nonconforming behaviors as smoking, drug usage, and alcohol consumption, theft, vandalism, fighting, and truancy.
3. Heterosexual orientation was related to such indicators of stress as boredom, sadness, self-concern, suicidal thought, physical abuse by parents, ability to communicate with parents, perception of parental acceptance, and perception of parental congeniality.
4. Heterosexual orientation was not related to college orientation but was related to current negative attitudes toward school.



5. Heterosexual orientation was related to favorable marriage orientation. Boys were less marriage oriented than girls at each H.O. level.
6. Guttman scales were constructed that support the existence of a developmental sequence as follows:
  - a. Marriage orientation
  - b. Had an opposite sex friend
  - c. Had been in love; had kissed or been kissed
  - d. Had gone steady; had kissed and hugged a lot
  - e. Had date

The findings indicated that preadolescent heterosexual orientation could be conceptualized on two developmental continuums: the social-emotional involvement and the physical involvement. For most children, development on the social-emotional involvement continuum is more rapid than on the physical involvement continuum. Advancement on the physical involvement continuum is likely to be more rapid at puberty when there is more societal support for this activity. Failure to distinguish sexual development on the two separate continuums may have resulted in the wide acceptance of preadolescent latency.

Suggestions for further research were offered.



## APPENDIX

### THE RESEARCH INSTRUMENT

## APPENDIX

### THE RESEARCH INSTRUMENT

#### Student Opinions

##### What This is All About

What Do You Think?    What Are Your Ideas?    What Do You Do?

Michigan State University is doing an important study to help understand what young people your age think and do.

Many times young people say that adults don't take time to listen to them. Now, here is your chance to give your own ideas about a lot of different things.

You can help us best by answering all the questions honestly.

NO ONE, not even your teachers, will ever know what answers you have given.

##### What To Do

1. There are 55 questions. Be sure to answer each and every question.
2. Each question usually has different choices; choose THE ONE that best tells how you feel.
3. Mark the answer in the proper place on the SEPARATE answer sheet.
4. Make sure the number where you place your answer mark has the SAME number as the question you are answering.

USE A DARK BLACK MARK AS IN THE EXAMPLE BELOW.



Sample Question: 22. I like to sleep late on weekends.

1. No
2. Sometimes
3. Yes

Elizabeth just loves to sleep late whenever she can.  
She would mark the answer sheet in this way.

	-	-	-	-
22.	1	2	4	5
	-	-	-	-

BE SURE TO USE THE SPECIAL SCORING PENCIL. DO NOT MARK  
THE BOOKLET.

AFTER YOU HAVE FINISHED, PUT THIS BOOKLET, THE ANSWER  
SHEET, AND THE PENCIL BACK INTO THE LARGE ENVELOPE.

YOUR ENVELOPE WILL BE PICKED UP BY THE MICHIGAN STATE  
UNIVERSITY RESEARCH TEAM AND TAKEN DIRECTLY TO EAST LANSING.

THANK YOU

1. How old are you?
  1. 8 or younger
  2. 9
  3. 10
  4. 12 or older
2. I am a
  1. boy
  2. girl
3. How many brothers and sisters do you have?
  1. None
  2. One
  3. Two
  4. Three
  5. Four or more
4. I am the
  1. Only child in my family
  2. Oldest child in my family
  3. Youngest child in my family
  4. None of these
5. In my family there are
  1. Only boy children
  2. Only girl children
  3. Both boy and girl children
6. Do you want to graduate from high school?
  1. No
  2. I'm not sure
  3. Yes
7. Do you want to go to college after high school?
  1. No
  2. I'm not sure
  3. Yes
8. My parents
  1. Want me to get a job instead of going to college
  2. Don't care if I go to college or not
  3. Want me to go to college after high school

9. Do you think you will be smart enough to finish college?
1. Probably not
  2. I'm not sure
  3. Yes, probably.
10. How many times have you smoked marijuana?
1. None
  2. Once
  3. 2 to 4 times
  4. 5 to 7 times
  5. 8 or more times
11. How many times have you used psychedelics (like LSD, STP, and mescaline)?
1. None
  2. Once
  3. 2 to 4 times
  4. 5 to 7 times
  5. 8 or more times
12. How many times have you used speed (like benzedrine, dexedrine and methedrine)?
1. None
  2. Once
  3. 2 to 4 times
  4. 5 to 7 times
  5. 8 or more times
13. How many times have you used hard drugs (like heroin, cocaine, and morphine)?
1. None
  2. Once
  3. 2 to 4 times
  4. 5 to 7 times
  5. 8 or more times
14. How many times have you used downers (like barbiturates, seconal, and phenobarbital)?
1. None
  2. Once
  3. 2 to 4 times
  4. 5 to 7 times
  5. 8 or more times





15. If you wanted to get drugs, how hard would it be?
1. Very hard
  2. Kind of hard
  3. Fairly easy
  4. Very easy
16. Do you like school?
1. No
  2. Sometimes
  3. Yes
17. Do you think teachers are nice?
1. No
  2. Sometimes
  3. Yes
18. Do you feel healthy?
1. No
  2. Sometimes
  3. Yes
19. Do you think police are helpful when we need them?
1. No
  2. Sometimes
  3. Yes
20. Are you bored?
1. No
  2. Only sometimes
  3. Yes, most of the time
21. Are you sad?
1. No
  2. Only sometimes
  3. Yes, most of the time
22. Do you care what happens to you?
1. No
  2. Sometimes
  3. Yes



23. Which subject do you like the most?
  1. Arithmetic or mathematics
  2. Science
  3. Social Studies
  4. Reading, spelling and writing
  5. Art and music
24. Do you believe that the Bible is God's word and what it says is true?
  1. No
  2. I'm not sure
  3. Yes.
25. Do you trust people?
  1. No
  2. Sometimes
  3. Yes, most of the time
26. Can you talk to your parents about anything you want to?
  1. No
  2. Sometimes
  3. Yes, most of the time
27. Do you think that your parents are glad that you were born?
  1. No
  2. Sometimes
  3. Yes
28. How many cigarettes do you smoke?
  1. I don't smoke
  2. I've only tried it a few times
  3. About 2 or 3 a day
  4. About 4 to 10 a day
  5. 11 or more a day
29. If you drink wine, do your parents know about it?
  1. I don't drink wine.
  2. No, they don't know about it.
  3. Yes, they know about it.



30. If you drink beer, do your parents know about it?
  1. I don't drink beer
  2. No, they don't know about it
  3. Yes, they know about it
31. If you drink whiskey or liquor, do your parents know about it?
  1. I don't drink whiskey or liquor.
  2. No, they don't know about it.
  3. Yes, they know about it
32. Do your parents do nice things for one another?
  1. No
  2. Sometimes
  3. Yes
33. Have your parents ever beaten you so badly that you were ashamed to be seen by others?
  1. No
  2. Yes
34. Have you felt bad about some of the things you have done?
  1. No
  2. Sometimes
  3. Yes
35. Have you ever felt so angry that you wanted to break things?
  1. No
  2. Sometimes
  3. Yes
36. Have you ever thought of killing yourself?
  1. No
  2. Yes



37. Boys: Have you ever kissed or been kissed by a girl who is not in your family?

1. No
2. Yes

Girls: Have you ever kissed or been kissed by a boy who is not in your family?

1. No
2. Yes

38. Boys: Have you ever kissed and hugged a girl a lot who is not in your family?

1. No
2. Yes

Girls: Have you ever kissed and hugged a boy a lot who is not in your family?

1. No
2. Yes

39. When you grow up, do you want to get married?

1. No
2. I'm not sure
3. Yes

40. When I get married, I want

1. I don't want to get married
2. A family with no children
3. A small family (only 1 child)
4. A medium sized family (2 children)
5. A large family (3 or more children)

41. Have you ever had a date?

1. No
2. Yes

42. How many persons have you gone steady with?

1. I have not gone steady with anyone yet
2. One person
3. Two persons
4. Three persons
5. Four or more persons





43. Have you ever asked anyone for a date?

1. No
2. Yes, once
3. Yes, more than once

44. Have you ever been asked for a date?

1. No
2. Yes, once
3. Yes, more than once

45. Boys: Have you ever been in love with a girl who is not in your family?

1. No
2. Yes

Girls: Have you ever been in love with a boy who is not in your family?

1. No
2. Yes

46. Boys: Have you ever had a girlfriend?

1. No
2. Yes

Girls: Have you ever had a boyfriend?

1. No
2. Yes

47. How often have you taken things that did not belong to you?

1. Never
2. Once
3. Twice
4. Three or more times

48. How often have you broken things that belonged to someone else?

1. Never
2. Once
3. Twice
4. Three or more times



49. Do you wish people would pay more attention to you?
1. No
  2. Sometimes
  3. Yes
50. How often have you gotten into a fight (like fist fighting, wrestling, scratching or hairpulling)?
1. Never
  2. Once
  3. Twice
  4. Three or more times
51. How often have you skipped school?
1. Never
  2. Once
  3. Twice
  4. Three or more times
52. How many times during the last week have you used aspirin?
1. Never
  2. Once
  3. Twice
  4. Three or more times
53. Have you ever used aspirin without your parents knowing about it?
1. No
  2. Yes
54. Do you think of yourself as naughty?
1. No
  2. Sometimes
  3. Yes
55. How do you feel about answering these questions?
1. I liked answering them
  2. I'm not sure
  3. I didn't like answering them



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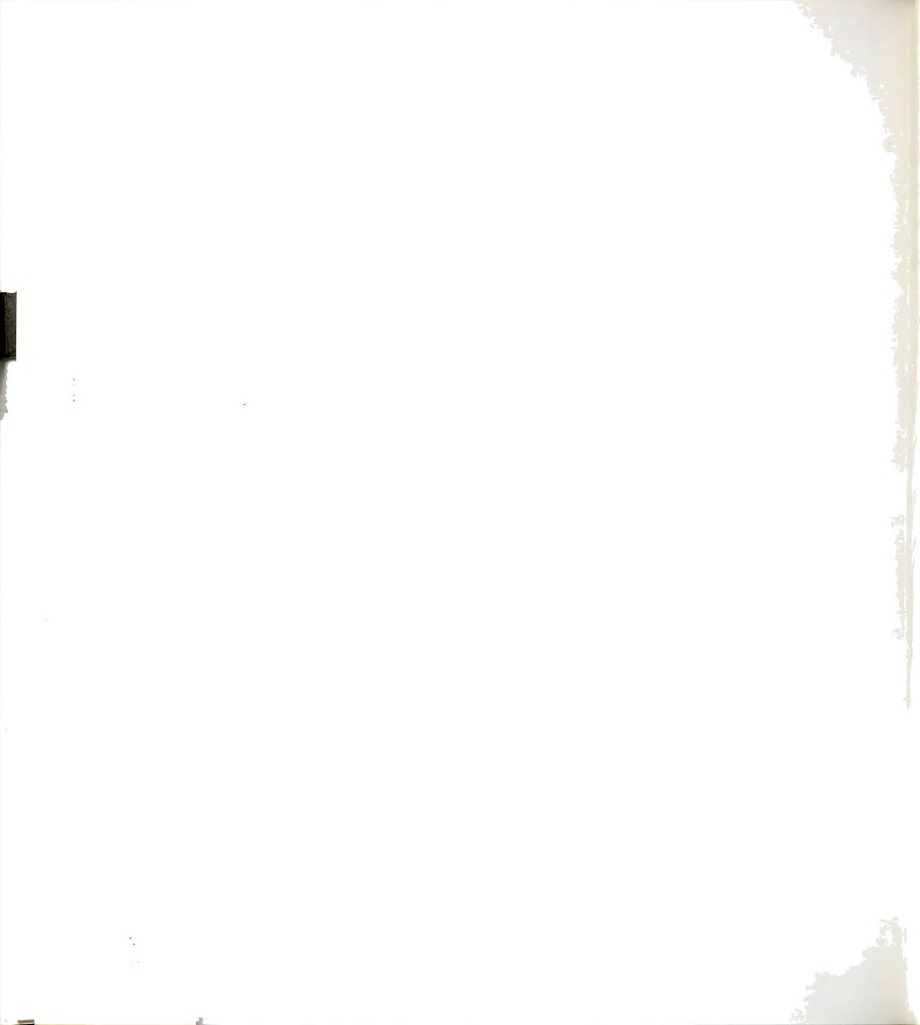












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