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**UNIVERSITY OF SAN DIEGO
Hahn School of Nursing and Health Science
DOCTOR OF PHILOSOPHY IN NURSING**

**ADOLESCENT PERCEPTIONS OF PARENT-ADOLESCENT
COMMUNICATION AND ADOLESCENT PREGNANCY**

By

Susan L. Tohm Lloyd, MS, RN

**A dissertation presented to the
FACULTY OF THE HAHN SCHOOL OF NURSING
AND HEALTH SCIENCE
UNIVERSITY OF SAN DIEGO**

**In partial fulfillment of the
requirements for the degree
DOCTOR OF PHILOSOPHY IN NURSING**

April 2000

Dissertation Committee

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ABSTRACT

Adolescent Perceptions of Parent-Adolescent Communication and Adolescent Pregnancy

Identification of adolescent perceptions of parent-adolescent communication, a significant factor in family functioning and connectedness, is important if effective interventions are to be provided by health care professionals related to decreasing the number as well as the adverse effects of adolescent pregnancy in the United States.

The purpose of this descriptive, non-experimental, triangulated study was to examine the relationship between the perceived quality and effectiveness of parent-adolescent communication and pregnancy from the perspective of pregnant adolescent women in the Banning/Beaumont area of southern California.

The theoretical framework for this study was based on adolescent and family developmental theories, family communication theory, and health-behavior theory.

The convenience sample of 56 pregnant female subjects was obtained from four sites in the Banning/Beaumont area of southern California including Banning High School, the Family Care Center, Dr. Yoo's Clinic, and Rancho Paseo Medical Group Clinic. The data was collected on site at each location during school hours or after a prenatal clinic appointment.

The research design allowed for collection of data from fifty-six subjects utilizing the Parent Adolescent Communication Scale (PAC) (Olson et al, 1985), a demographic questionnaire, and audio-taped interviews to capture personal feelings and perspectives of adolescents related to parent-adolescent communication patterns, which were used to further describe the PAC scores.

Descriptive statistics were used to describe the sample and the study variables. Individual PAC scores for adolescents related to their mothers and adolescents related to their fathers were tabulated and compared with established norms set up by the PAC scale. A descriptive comparison was made between each demographic variable and adolescent-mother and adolescent-father PAC scores. Each comparison was discussed and interpreted. A Pearson correlation was run for the demographic characteristic "age" and the PAC scores for adolescents related to their mothers and fathers. A t-test was performed between the PAC scores of adolescents related to their mothers and adolescents related to their fathers. Qualitative interview data identified six major themes.

Conclusions drawn from the findings indicate that adolescent perceptions of communication between adolescents and their parents in Banning, CA are very poor. Adolescent perceptions of communication with their mothers are considerably lower than with their PAC normed counterpart adolescents. Adolescent perceptions of communication between these adolescents and their fathers are much more troubled than communication between PAC normed adolescents related to their fathers. The t-test confirms statistical significance that adolescents score much lower on their perceptions of communication with their fathers (46.1) than in their communication with their mothers (56.26). The qualitative data documents patterns of poor communication, a perception that pregnancy increases adolescent-parent communication and relationships, and poor family connectedness. Recommendations were made for further research.

DEDICATION

Personal support and encouragement for the completion of this project has come from many sources and has enabled me to carry this project to completion and check it off of my "life list." I would like to dedicate this dissertation to the following people.

Special thanks and appreciation go to my husband, Fred Lloyd, who has been very patient, understanding and flexible with the disruptions in our family life during the past few years and who always encouraged me to continue reaching out toward my career goals.

Appreciation and thanks go also to my great children, Erik, Michael, Amye, & Kristen, who have been very understanding about mom having to study on the weekends, and helpful in sharing the household chores. They are very glad mom is done with school!

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CHAPTER I

INTRODUCTION

Over the past few decades, the issue of adolescent pregnancy has attained an increased awareness and priority status within our society and specifically among health care providers. Specifically, adolescent pregnancy, abortion, and birth rates have been shown to be higher in the United States than in most other industrialized societies worldwide (Cockney, 1997). The adolescent pregnancy rate in the United States is continually quoted in the research literature as reaching “one million adolescent women” every year. Current statistics indicate that unintentional pregnancy is the result for about 73% of these births to teen moms (Mosher & Bachrach, 1996).

This high incidence of adolescent pregnancy is seen to be a crisis as well as a priority health care issue needing careful attention and intervention by health care providers, including nursing professionals in the current environment. Nursing research in this area is scarce.

Statement of the Problem

Many health care professionals have worked toward facilitation of change related to decreasing the adolescent pregnancy rate from the basic assumption that what is needed to solve this problem is simply increased health education and better access to contraceptives. The issue of teen pregnancy in the United States is more diverse and complex than that and encompasses numerous variables and indicators which differ from local communities to specific geographic regions. There seem to be no programs which

have been quantified by research and shown to be consistently effective over time with statistically significant results (Cockney, 1997). New research is needed which identifies and reflects the problem of adolescent pregnancy from the perspective of pregnant adolescents related to traditional family relationships and communication patterns with parents. It is important to examine how these types of variables affect the sexual risk-taking behaviors of adolescents, such as early initiation of sexual activity and adolescent pregnancy.

The issue of teen pregnancy was recognized as an issue of national concern in the United States during the early 1970's, and continued media reports about the issue indicate there is continued concern today. Research and implementation of specific prevention strategies have generally focused on the identification of specific risk factors and the development of intervention programs which were based on these identified risk factors. These efforts seem to have been mostly unsuccessful in decreasing the teen pregnancy rate or in changing societal problems and patterns related to teen pregnancy. Much of the current research data identifies the need to look at other factors which influence adolescent lives in terms of socioeconomic factors and social disorganization or dysfunction within families. Some of these factors would include support, communication and interaction within the family unit correlated with personal motivation and ambition for the future on the part of the adolescent (Kirby, 1997).

Communication has been recognized as a vital component to human interactions in many arenas. Gottman in 1979 identified communication as paramount to all human interpersonal relationships. Scholars in the area of family science have long recognized that communication is a vital component of family interacting and essential to

the understanding of family functionability. Various models and perspectives to family communication have been proposed and evaluated. Family communication has also been shown to be a complex process, with each member in the family unit, including adolescents, perceiving how it works from their own perspective (Gottman, 1979; Jenkins, 1990). The Circumplex Model included communication as an important element. The model emphasizes the elements of family cohesion (or connectedness) and adaptability (or flexibility) and defines communication as a “facilitating variable which may increase, maintain, or decrease the amount of cohesion and/or adaptability within the family unit” (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1985).

The effectiveness of family communication has also been suggested as possibly having an impact on the risk for adolescent initiation of early sexual behavior and adolescent pregnancy. Some researchers found that adolescents who communicated well with their parents about sexual information showed a lower risk for adolescent pregnancy (Furstenber, Hercog-Baron, Shea, & Webb, 1984). There is very little in the literature related to father-daughter relationships and the risk for an early pregnancy. Mothers are considered to be the primary consultant for the adolescent related to sexuality issues. From the perspective of mother-daughter relationships, one study was conducted in which mothers believed they had open communication with their daughters related to sexual information which helped to delay the initiation of sexual behavior in their daughters. However, the daughters reported no difference or significance between the openness of communication with their mothers about sexual information and their personal sexual behaviors. This difference indicates a potential for differences in perception between parents and adolescents related to family communication patterns.

Specific research studies related to communication and adolescent pregnancy are primarily addressing communication related to the provision of sexual information to adolescents from the parental perspective, and do not address the importance of parent-adolescent communication and adolescent pregnancy. Studies related to generic communication patterns between parents and adolescents from the perspective of pregnant adolescent girls are seriously lacking (Newcomer & Udry, 1985).

Specific variables about family functioning and the family connectedness related to reducing the initiation of sexual activity on the part of adolescents in the effort to reduce teen pregnancy have not been identified. It is important to determine if adolescent perceptions of parent-adolescent communication are a significant factor in relating to adolescents sexual behavior and ultimately the adolescent pregnancy issue.

Purpose of the Study

This present study is undertaken to increase knowledge of the parent-adolescent communication factors which influence the adolescent pregnancy rate in a population of adolescent women living in the Banning/Beaumont area of southern California.

For the purposes of this study, specific aims included:

1. To identify and measure adolescent perceptions of the overall quality of parent-adolescent communication using the PAC (Parent-Adolescent Communication Scale) among a group of pregnant girls at the Banning High School campus, at Rancho Paseo Medical Group clinic, at the OB/GYN clinic run by Dr. Yoo, and at the Banning Family Care Center. All sites are located in the Banning/Beaumont area of southern California. Data was collected from November 1998 through February 1999.

2. To examine the effect of the PAC score with each of the demographic categorical variables in a group of pregnant girls in the Banning/Beaumont area of Southern California from November 1998 to February 1999.
3. To interview and compare from a qualitative perspective a group of pregnant girls in the Banning/Beaumont area of Southern California in which they relate personal feelings and perspectives regarding personal parent-adolescent communication and their current pregnancy.

Background of Study

The apparent discrepancy between the numerous factors identified in the research literature which place adolescents at risk for adolescent pregnancy and the results of the prevention programs which have been based on this research has important implications in the effort to effect change related to this issue.

During the last thirty years there have been many studies which have undertaken the task to determine specific variables or risk factors related to early sexual behavior, adolescent pregnancy, as well as the effects of childbearing by adolescents (AGI, 1994).

These studies have identified many risk factors or variables which may be correlated or interrelated in some way to sexual or contraceptive behaviors, as well as with pregnancy and/or childbearing (Morgan, Chapar, & Fisher, 1995).

The majority of these risk factors relate to individual adolescent characteristics, the characteristics of adolescent peers and partners, family support and communication factors, as well as demographic characteristics which impact adolescents related to the

geographic community in which they live. These variables help to provide a general idea of which adolescent youth are most at risk (Rosenfeld & Everett, 1996).

The literature discusses how family influence relates to a parent-child discussion about sexual matters, including the parents' personal sexual practices, and the family rules which have been set up for adolescent dating. It is felt that when adolescents feel positive about these parental boundaries and parental communication is seen to be open, the risk of adolescent pregnancy will be decreased (Resnick, Bearman, & Blum, 1997).

If family functioning and connectedness, of which communication is a major component, is seen to be an important component as it relates to adolescent sexual activity and ultimately adolescent pregnancy, knowledge of these factors could be used in the planning and design effort of specific interventions. Health professionals would be enabled to assist adolescent women in making positive, life decisions which could help alleviate peer pressure to become involved in sexual activities.

The problem of adolescent pregnancy is an emotional one and is well documented in the literature. Recent local media headlines have shouted "teen moms facing murder charges," as the incidence of teens hiding pregnancies from their families or delivering babies in school bathrooms or hotel rooms has risen. It has also been reported that teen moms often strangle their babies and dispose of them in trash bins (Muckenfuss, 1997).

It is generally reported that among industrialized nations the United States has the highest rate of adolescent pregnancy, reaching rates of one million pregnant adolescents every year. Included in that figure, 12% of all U.S. women aged 15-19 and 21% of all U.S. women who have participated in sexual intercourse will experience pregnancy

yearly, and about 73% of these pregnancies are unintentional (Spitz, Velebil, Koonin, Strauss, Goodman, Wingo, Wilson, Morris, & Marks, 1996).

It has also been demonstrated that many teens become pregnant the second time before their 20th birthday and often within one year's time (Morgan, Chapar & Fisher, 1995). Cockney gives statistics to indicate that most teens start having sex one year before they ever actually visit a contraceptive clinic and that pregnancy will usually occur within a six month time frame from the beginning of sexual intercourse (Cockney, 1997).

Some optimists point out statistics which seemingly indicate that birth rates for all teens 15 to 19 years of age may have dropped in some areas since the 1950's and 1960's (Cates, 1991); however, this statistic is seen by others as misleading since the birth rate for unmarried teens in the same age category grew (Cockney, 1997). This seems to indicate that birth rates have only dropped among married teens. The largest increase in non-marital teen births occurred among white teenagers (Moore, Miller, Gleib, & Morrison, 1995).

According to AGI (1994), the teen abortion rate and adoption rate is decreasing among teens. Another problem is the exceptionally high STD rates for sexually active adolescents (Forrest & Singh, 1990). Costs for caring for a pre-term infant have been identified by some authors as more than \$100,000 and in 1990 the United States paid \$25 billion in Aid to Families with Dependent Children to teen moms. Total costs related to adolescent pregnancy have been reported to exceed \$34 billion every year (Donnovan, 1997). Adolescent pregnancy has also been associated in the literature with other high risk behaviors such as smoking and alcohol use (Mittlemark, Murray, & Luepker, 1987).

Theoretical Framework: An Overview of Adolescent/Family Development, Family Communication and Health-Behavior Theory

The terms “adolescent” and “teenager” are used interchangeably in the literature, although not technically defined as such. Adolescence, as defined by Webster’s Dictionary, includes the time of human life beginning with puberty and ending with maturity, a time which varies with each individual adolescent. There are five components of this time frame which have been identified and include chronological age, biological development, psychological maturity, legal status, and lifecycle events (Elster & Lamb, 1986). The term “teenager” generally implies and describes only chronological age (Gordon, 1996). For the purpose of this paper, the terms will be utilized as in the literature, interchangeably. Theoretical perspectives relative to adolescent psychosocial and cognitive development along with moral decision making are important in informing issues of teen sexual activity and the results of unintended pregnancy. For the purposes of this discussion, only major contributors to the literature related to adolescent theory will be discussed.

Specific developmental theories were proposed during the eighteenth century suggesting that children were different than adults, which differed from the previous school of thought, which believed children to be simply smaller versions of adults. Most of the current theories which are prevalent are related to the development of the whole individual, such as Erikson and Piaget’s theories (Burr & Day, 1993). Adolescent developmental theory will be looked at from the perspective of these theories.

Adolescent psychosocial development focuses on three stages and is categorized as early, middle, and late adolescence with each stage covering about three years. Early

adolescence, ages 11 to 15, is thought to bring turmoil and chaos into adolescent lives due to physical and hormonal changes. During this stage, adolescents are looking to be somewhat in control, and may show defiance to authority figures. Ages 14 to 18, identified as middle adolescence, focuses on issues of self-identification and self-realization, where sexual priorities for girls are the development of intense, loving relationships with boys, while boys are seen to be primarily interested in the physical pleasures of sexual activity. Late adolescence, ages 17 to 20, is focused on coping with the changing roles of adulthood (Elster & Lamb, 1986).

Various other theorists have identified adolescent cognitive development in the literature. Erikson's Life Cycle Theory begins with adolescence and continues into late adulthood and identifies, from a psychopathological framework, psychosocial crises as adaptation events which progress through eight hierarchical developmental stages (Erikson, 1987). Also, one of the major tasks of adolescence is the ability to achieve a sense of personal identity (Erikson, 1968). The adolescent searches and attempts to make his own life-style decisions, to find a personal sex role and career, and an attempt will be made to have a close relationship outside of the family unit. Erikson also believes that actual intimacy will occur during adulthood, and after a personal identity has been achieved (Erikson, 1968).

Piaget, a prominent cognitive developmentalist, modeled his theory of concrete thinking versus formal operational thinking according to age and described important changes in the cognitive development of children and adolescents. Piaget believed that levels of comprehension and reasoning advance in an orderly pattern with each age

group, which is primarily determined by the individual ability to collect and process information (Piaget, Brown, & Kaegi, 1981).

The main concepts provided by this theory include concrete versus abstract thinking, a present versus future orientation, and the ability to consider only some options versus all options (Piaget, 1952). As the child matures, the brain is able to store increasing amounts of information, making it possible to use and correlate this information (Flavell, 1985). The importance of the future orientation of adolescents is stressed (Inhelder & Piaget, 1958). This idea is taken one step further in describing a greater ability to consider the future in older adolescents as opposed to younger adolescents related to decision making ability (Urberg & Rosen, 1987). Some researchers question Piaget's idea that the formal operational stage is normally reached by almost all adolescents (Coblener, 1974). Others disagree, believing not all adolescents reach this stage. They propose that only a small percentage (30%) of adults ever reach this final stage (Kuhn, Langer, Kohlber, & Hahn, 1977).

Adolescents who are able to get to this stage are able to picture how information applies to themselves and how they can use it to plan for the future. For example, a pregnant teen might have the cognitive ability to understand how her life style choices will affect the baby and use that information to quit smoking and using drugs. She is then able to begin to make plans about how she wishes to parent the child (Drake, 1996). It is also possible that the adolescent will use formal reasoning in making some decisions but not in others. Some authors have advocated operational level decision-making skills for use in decisions related to sexuality (Gordon, 1996; Sachs, 1986). For example, an adolescent at an earlier stage of cognitive development might decide not to

participate in sexual behavior with a boyfriend based on the rationale that she might get caught by her parents; an adolescent at a later stage of cognitive development might make the same decision by considering her own personal future, and the effect having a baby when she is so young will have on her future life (Gordon, 1996). Also, it has been shown in the literature that as cognitive ability develops with age there is a correlation with age and making a choice to use contraceptives when engaging in sexual behavior (Sachs, 1985). Elkind proposed a theoretical model of egocentrism related to adolescents based on Piaget's work. He believed that as formal thought processes come into being, the adolescent begins to understand an issue from another person's point of view. During this stage, however, the adolescent may be self-centered, always thinking everyone is watching him and believing other people are, for example, as interested in all aspects of who he is, as he is. The "personal fable," or uniqueness of the teenager's feelings, including the feeling of being immortal is also described, and this theory has been utilized by some authors to explain the lack of contraceptive use by adolescents because of the inability to believe that pregnancy could actually happen to them (Elkind, 1967).

One model of development identifies the female experience of cognitive development in six stages including silence, received knowing, subjective knowing, intuition, separate and connected knowing, and constructed knowing. Important concepts for women at all stages include relationships with others and the problem-solving context (Belenky, Clinchy, Goldberger, & Tarule, 1986). Application of this model in adolescent decision making regarding the initiation of sexual activity or contraceptive use, for example, may relate to pressure or approval by peer groups or role models.

Kohlberg's moral developmental model, based on a "justice" perspective, talks about cognitive development in terms of specific moral rules, which should be the same for everyone (Turner & Helms, 1995). The stages are presented as sequential, and represent moral developmental changes which are similar to the stages of intellectual development and the ability to reason. The pre-conventional level identifies moral development of the individual as self-centered in response to moral situations, and identifies most children under the age of nine, as well as some adolescents and adult criminal offenders in this category. The conventional level is identified by moral decision-making which conforms to family or cultural group norms, and is representative of most adolescents and adults. The post-conventional level revolves around individual definitions of moral values, and the ability to create personal morality, which may differ from societal norms, and are based on standards of universality and impartiality. This level is seen as the highest stage of moral development (Cassidy, 1991). The model's purpose is to provide an objective assessment of moral cognitive development.

More recently Gilligan, a student of Kohlberg's, in her moral development work recognized and discussed personal identity and moral development within a conceptual framework which describes responsibility and caring as the major tenants. From research interviews with adolescent and adult women, she identified how moral problem solving is carried out related to how much a woman feels responsible within a specific relationship she considers to be important. Moral developmental stages seem to vary according to the ranking of those relationships (Chally, 1993). She identified the period of adolescence for girls as a time of crisis and described it as the beginning of

“disassociate processes,” which puts this developmental period “out of reach of the intellect” (Gilligan, 1996). In these interviews, she had the feeling that what the girls were communicating was a difference between what was going on inside of them internally and what was actually happening to them in the external environment. Gilligan states, “listening to girls speak of themselves, their relationships, their responses to conflicts and their construction of conflicts, their hopes and their fears, I often had the sense that they were living in what they knew to be a fictional world, and living in that world as if it was real” (Gilligan, 1996, p.241). So basically she is saying that the ability of adolescent girls to have the appropriate knowledge to make good decisions for themselves is influenced by their own personal life knowledge and experiences, and these areas are especially important related to decisions they make about the initiation of sexual behaviors and the issue of pregnancy by adolescent women.

Family-development theory was identified from the theoretical perspective of Duvall and Hill in 1945 and follows the format of individual development theory. There are two basic assumptions to this theory. First, there is a basic order in the development of individuals and families in which genetic and environmental factors combine to determine what individuals and families are and what they do. Secondly, there is the belief that individuals or families can improve through a healthy process of continuous maturation and growth. The major concepts involved in this theory include specific developmental tasks, the family life cycle and stages, and the progress of the family as they work their way through these stages (Burr & Day, 1993). Family-development theory could be useful in describing the adequacy of parent-adolescent relationships and communication effectiveness in working with the teen pregnancy issue.

Another important perspective in viewing the family as a group of individuals who work functionally together in the specific tasks of decision making, problem solving, and goal achievement is identified as family-systems theory (Young, Jensen, Olson, & Cundick, 1991). Day (1995) identifies this theory based on specific levels of interaction which occur within families. Level one identifies specific family interactions related to everyday occurrences such as daily routines, and family interactions and communication. Level two shows more complicated processes such as silent rules which are only understood within a specific family unit when a specific situation arises. Level three includes the context within which the family operates and identifies basic assumptions within the family which may be demonstrated in various ways such as closed, open, or random actions between family members (Day, 1995). The importance of using this theory would be in identification of a presenting problem or situation occurring within the family, and by taking the event apart piece by piece to determine why something happened, for example determining the causative factors of teen pregnancy.

It is well accepted in the literature that communication is the basis for family interactions and it is an essential element to be understood within the context of family functioning. There are many definitions and models of communication. Fisher (1978) has identified communication processes which take place within families from four basic perspectives. These include approaches which seem to be mechanical responses, those which are psychologically based, the specific interactional approaches, and certain pragmatic approaches (Fischer, 1978). The pragmatic approach seems to be primarily important in looking at family interaction as a whole from a systematic standpoint. This approach focuses on the behavior of the communicator in which the non-verbal behavior

itself is the communication. This theory was primarily identified by Watzlawick, Beavin and Jackson in 1967 and came from systems theory. This perspective is utilized often by scholars studying family communication to look at a family event when diagnosing a problem such as teen pregnancy. Most therapists using this approach would not look for one specific isolated factor, but rather work on a continuing, long-term basis to examine the specific event within a specific family relationship in an organized manner. This process could be very helpful in determining the cause of the crisis event and the implementation of specific tools which could be utilized to correct problems (Jenkins, 1995).

In summary, adolescent developmental theory has been identified in the literature relative to psychosocial, cognitive, and moral development, including work on gender developmental differences, and is seen as essential in understanding adolescent behavior in general. It has been utilized in the adolescent pregnancy literature on a very basic theoretical level with interventions planned around varying aspects of the theoretical frameworks.

Family-development theory, family systems theory, and the pragmatic model of the communication process impacts the adolescent pregnancy issue by identifying potential situations or events which may bring on early experimentation with sexual behaviors or other risk-taking behaviors among adolescents if there is a breakdown in parent-adolescent relationships.

It has been shown that pregnancy is the result of specific sexual behaviors and/or the lack of contraceptive behaviors. Therefore, understanding the specific adolescent health-behavior change theories which identify the most closely related

causative factors to teen pregnancy is important. These theories will be identified and discussion will center on their use as a basis for specific intervention programs planned in the effort to reduce the adolescent pregnancy rate.

In the 1950's Rosenstock, a social psychologist, proposed the Health Belief Model which brought together the psychological theories of decision making. This model attempts to explain the actions which are the result of an individual's choice in a specific situation, and an individual's decision-making processes about personal health behaviors. The model assumes that good health is an important belief system for everyone. Rosenstock believed that the behavior motivation theory underlying the Health Belief Model was related to the Lewinian theory of goal setting (Rosenstock, 1980). Some modifications to the initial Health Belief Model were made by Becker in 1974 to include the idea that individual perceptions affect behavior change. An example might include the idea that if an adolescent was truly motivated to have good health, they would utilize contraceptives when engaging in sexual activity. This model has been used as the basis for several of the adolescent pregnancy intervention programs.

Social cognitive theory suggests that the factors of human motivation and behaviors are primarily based on the ability to think ahead (Schwarzer & Fuchs, 1995). In the social cognitive view, people are not motivated from within or without. Instead, the way humans function is very complex and includes many factors related to specific behaviors, cognitive factors, environmental factors, and individual differences (Bandura, 1986). Use of the term self-efficacy, in which behavioral change is facilitated by a personal sense of control, is a key element in social cognitive theory, and was introduced in 1977 by the psychologist Albert Bandura at Stanford University (Schwarzer

& Fuchs, 1995). Social cognitive theory also believes that goal setting increases people's cognitive and affective abilities and are related to outcomes (Zimmerman, Bandura, & Martinez-Pons, 1992). Goal setting ability is seen to be dependent upon a person's level of maturity.

The Theory of Planned Behavior proposes actual behavior is directly influenced by an individual's personal decision to carry out an action. An individual attitude towards a behavior, either positive or negative, can also be affected by personal beliefs and perceptions (Ajzen, 1989). This theoretical interpretation has been applied in the literature to women's choices about the use of contraceptives in the attempt to prevent pregnancy (Floerchinger-Franks, 1996).

The Theory of Self-Regulation and Control, as it is applied to behavioral change, was described in 1970 by Kanfer, as being an orderly process with three distinct stages. These stages include self-monitoring or observation, self-evaluation, and self-reinforcement. Utilization of these stages occur when a decision is required among various decision options or responses to behavior. In the end, a person has to assume responsibility for changing and/or maintaining his own behavioral patterns, no matter which variables and/or support systems are in place (Kanfer & Goldstein, 1975). It has been assumed in the research literature that adolescents are not developmentally capable of this responsibility.

The elements of the prominent theories identified above, which include the individual's intention to carry out the behavior, the lack of physical or environmental barriers which might prevent the behavior, and the individual's ability and motivation to act out the behavior (Fishbein, Bandura, Triandis, Kanfer, Becker, & Middlestadt,

1991), are supported by the major bodies of research, such as general health-related behaviors, adolescent behavior, and adolescent sexual behavior.

Social learning theories have been used to identify and correlate the causative behaviors with the skills necessary to avoid sex or to use contraception. The ability to perceive and be motivated about the benefits of avoiding early sexual behavior, along with a personal sense of confidence that one can be effective in utilizing specific methods of contraception, is termed self-efficacy (Bandura, 1986; Ajzen & Fishbein, 1975).

These theories have been considered important in the effort to understand adolescent sexual health behavioral patterns, and have been used as the theoretical framework for several partially successful intervention programs (Kirby, 1997). However, the application of these theories in teen pregnancy research is limited and it cannot be assumed that these theories will be completely effective in the planning and implementation of intervention programs.

Significance of Study

It is known by most people in our society that many adolescents participate in sexual activities which, very often, lead to pregnancy. Before the mid 1970's however, the issue of teen pregnancy was not considered to really be a societal problem. The issue was not discussed in polite society, and most people considered the problem as a moral breakdown in a family, especially when pregnancy happened to an unmarried adolescent. It was not considered to be an issue when an adolescent got married and had children at a young age. Up until the end of World War II, birth rates among teenagers were at a rate of approximately 50 to 60 births per thousand women. Teen birth rates began to increase considerably after World War II, and doubled among baby boomers to a level of about 97

births per thousand adolescent women by 1957. By 1975 these birth rates went back down again to their original levels and they have stayed in those ranges (Luker, 1991). In 1975 Congress began to publicize the issue by holding public hearings on this issue. The idea of “a million pregnant teenagers a year” was a scary, new thought to the general public at that time (AGI, 1994).

Most people who heard these statistics, which were provided generally by the Alan Guttmacher Institute (AGI), a self described not-for profit corporation for Reproductive Health Research, Policy Analysis and Public Education during the past twenty years, assumed that the adolescents were all unmarried (AGI, 1994). This was not necessarily true. Some authors believe in reality, many of these “million pregnant teenagers” were eighteen and nineteen year olds and married, with the majority of these teens getting married before becoming pregnant (Luker, 1991). So, it is believed by some that although pregnancy rates among teens seemed to be increasing, it was actually the percentage of teen births which occurred outside of marriage which were increasing (AGI, 1994). However, the publicity of a “million pregnant teenagers” a year brought a sensational awareness upon the country.

Congress created a federal office in 1980 to try to solve the adolescent pregnancy issue. This initiated efforts on various levels, with twenty three states setting up task forces, and the 1988 National Survey of Family Growth (NSFG) study with its’ follow up telephone interview in 1990, provided continuing information about the fertility and health of American women (Mosher & Bachrach, 1996). Approximately 50 studies have been based on this survey. The last National Fertility Survey was conducted in the United States in 1995, and it was reworked in the effort to increase quality data

reporting and to include new information important to women's reproductive health needs and concerns.

Recently, a renewed effort has been implemented to confront the adolescent pregnancy problem beginning at the national level. Currently, government involvement in the issue has included the 1996 welfare reform laws to provide teen pregnancy prevention programs in at least one fourth of all communities. According to Donna Shalala, current secretary of the U.S. Department of Health and Human Services, programs are now in 30 percent of all communities. Funding is also in place for new programs emphasizing abstinence education. Beginning in February of 1998 the National Campaign to Prevent Teen Pregnancy began working toward the new strategic goal of reducing teen pregnancy rates by one third by the year 2005. These beginning preventative efforts are targeted at girls who are age 9 and older (Cockney, 1997). Discussion about the problem continues among many communities about how best to tackle this problem. There has been no national consensus.

Research Question

The research question considered in this study was:

What is the relationship between the perceived quality and effectiveness of parent-adolescent communication and pregnancy from the perspective of pregnant adolescent women in the Banning/Beaumont area of Southern California?

Assumptions

The basic assumptions important to this study were as follows:

- 1. Parents and families influence choices adolescent children make about their own sexual behavior.**
- 2. Parents who give clear messages about early sexual involvement have children who are less likely to have early intercourse, and therefore are less likely to experience adolescent pregnancy.**
- 3. Adolescents who perceive higher positive levels of parent-adolescent communication within their families will be less likely to experience adolescent pregnancy.**
- 4. Adolescents who are pregnant are more likely to perceive lower levels of positive parent-adolescent communication patterns within their families than are their non-pregnant counterparts.**

CHAPTER II

A REVIEW OF THE LITERATURE

Risk Factors and Evaluation of Programs: A Review of the Literature

Risk Factors. During the last three decades numerous researchers have conducted hundreds of studies in the attempt to identify specific causes, or antecedents as they are termed along with risk factors related to the issues of adolescent sexual behavior, pregnancy, and childbearing. It has been shown in the literature that there are many and various factors which are in some way related to these issues (McCullough & Scherman, 1991). For the purposes of this discussion, the risk factors will be categorized as Kirby (1997) identified them. These include individual characteristics, adolescent peers and partners characteristics, family characteristics, and state and community characteristics. These categories and risk factors can provide a basic start in the identification of high risk adolescents who are most likely to become pregnant at a young age (Rosenfeld & Everett, 1996).

Individual characteristic risk factors related to teen pregnancy for either adolescent males or females include biological and psychosocial factors. Biological factors include characteristics such as age and ethnicity. Biological age is related to several adolescent development stages including physical, psychosocial, and hormonal changes, changes in life experiences, and the length of time an adolescent is exposed to other risk factors (Santelli & Beilenson, 1992). There are many more 18 to 19 year old

mothers than 15-17 year old mothers, although most studies look at 15 to 19 year olds (AGI, 1994). The demographics of ethnicity and race have been shown to be correlated with decision making about sexual activity (Kantner & Zelnik, 1972; Speraw, 1987) and affect teen pregnancy rates. Ethnicity and poverty are variables often linked together in research, with the impact of each declining when they are studied as risk factors individually (Santelli & Beilenson, 1992). Psychosocial antecedents include school performance (Robbins, Kaplan, & Martin, 1985) and marital status (AGI, 1994). An adolescent's negative experience with school has been associated with early sexual activity and involvement. There has been an increase in the average age of marriage, attributed to the changing economic reality of the 1970's and 1980's, with marriage being traded for simply living together and many teens have postponed marriage and childbearing in order to obtain careers. Presently, out-of-wedlock births account for almost seven in 10 of all births to adolescent women (AGI, 1994).

Adolescent risk factors for pregnancy include the influence of peers, sexual abuse, and age of male partner, which is often several years older than the adolescent. The influence of best friends and same sex friends on adolescent sexual behavior is seen as very important (Mittelmark, Murray, & Luepker, 1987). Sexual abuse identified in the form of rape or incest as a causative factor to the initiation of teen-age sexual activity and pregnancy, is not well described in the literature; however, there is data which suggests it may play a role (Boyer & Fine, 1992). In one study of Illinois teen mothers, 61% reported unwanted sexual experience and 33% reported unwanted sexual intercourse, with the mean age being 11.5 years (Moore, Blumenthal, Sugland, Hyatt, Synder, & Morrison, 1994). Age of the male partner generally involved in teen

pregnancies has been shown to be older. Only 26% involved with women under 18 are estimated to have been very young; 35% are aged 18-19, and 39% are at least 20 (AGI, 1994). Important family characteristic risk factors include income level and family influence. Income level has shown that half of young women who are poor or low-income say they have had sex by age 17, about four months sooner than higher income adolescent women (AGI, 1994). These women are more likely to live in poverty, probably never work, and probably never receive a basic high school education (Cockney, 1997). The factor of family influence has only been studied briefly relative to parent-child communication regarding sexual behavior and how parents make rules about the dating practices of their teens. The results of previously discussed research studies indicate there are differing perspectives related to the correlation of parent-adolescent communication and the subsequent risk for adolescent pregnancy. One study showed no relationship between open parent-adolescent communication which was about sexual topics (Newcomer & Udry, 1985). Teen-parent communication related to adolescent pregnancy has not been studied enough to be validated in the literature.

It has been assumed that there is not a lot of communication existing between parents and their adolescents, particularly related to reproductive/sexual information and fathers. Family communication may have a very small effect on the initiation of sexual intercourse among certain groups of adolescents such as adolescent girls who have conservative parents with traditional values (Moore, Miller, Glei, & Morrison, 1995). Religious affiliation was thought to be a causative factor of adolescent pregnancy in the 1950's and 1960's. However, by the 1980's the correlation of these factors had been dismissed. Instead, others found attendance at religious activities

to be related to lower pregnancy rates for adolescents (DuRant, Seymore, Pendergrast, & Beckman, 1990b).

Contraceptive use has been suggested as an indication of a willingness on the part of the adolescent to behave more in line with what is socially acceptable (Floerchinger-Franks, 1996). Also, adolescent girls who have older sisters who were teen mothers are at greater risk for a teen pregnancy (AGI, 1994). These risk factors are not the same in how they affect adolescent sexual activity, and there has been no way to measure their potential effect related to adolescent use of contraceptives (Santelli & Beilenson, 1992; Zelnik & Kantner, 1979).

Risk factors related to state and community characteristics seem to identify adolescents living in high turn-over residential areas as being at high risk for pregnancy (Singh, 1986). Some of these risk factors include school drop outs (Singh, 1986), adolescents with unemployed parents (Ku, Sonenstein, & Pleck, 1993), adolescents who live in communities with a high crime rate (Moore et al., 1994) and adolescents who live in communities where there is strict legal control making contraceptive access difficult (Lundberg & Plotnick, 1990).

Another problem is that community practitioners at times hesitate to provide family planning services to adolescents. A study indicated that 22% of physicians in private or general family practice refuse to serve minors, and 19% of family practitioners provide contraceptive services only with parental consent (Hatcher, Trussell, Stewart, Kowal, Guest, Cates, & Policar, 1994).

As one can tell by the number and complexity of the risk factors found in the literature, there is no clear consensus about the causes for teen pregnancy, although there

have been many attempts to understand it. There are a high number of risk factors or antecedents identified in various categories, but these have not been ranked in terms of significance to the issue, or interrelated specifically with each other to determine primary causative factors. Most of these research studies have not been replicated.

The inability to measure how much effect a risk factor has on adolescent pregnancy is problematic. Most studies have focused on only a small number of the risk factors and therefore it is difficult to understand the full scope of the problem. Another difficulty is the inconsistency of conclusions when a study measures only one piece of the puzzle related to risk factors.

Many of the risk factors have shown only a small influence upon behavior. Others such as biological risk factors are impossible to measure or change, and yet other risk factors which involve sexual beliefs, values and norms, make change very difficult. The complexity of the risk factors would seem to suggest that it would be very difficult for pregnancy prevention programs to reduce adolescent pregnancy rates significantly, based solely on the utilization of this research. The overwhelming consensus remains that adolescent pregnancy is a serious problem and that public policies and programs need to be implemented to reduce its incidence and decrease its consequences.

Evaluation of Programs

Two basic approaches have been recommended in the literature and utilized in the development and implementation of many intervention programs in communities nationwide. These approaches focus on either delaying the initiation of sexual activity until "later," or the attempt to provide medical and social services to teens who are pregnant or to help parents have healthy babies and to help keep teens in school (Spitz et

al., 1996). Research studies which relate to the evaluation of these intervention programs which have been implemented in various communities, are seen to be an effective method for measuring the impact of those programs (AGI, 1994; Kirby, 1997). Various types of programs have been developed in hope that they would be effective in reducing the high adolescent pregnancy and STD rates. Many of these programs have been implemented in various settings including schools, health and family planning clinics, and community agencies (Brindis, 1990). There are many differences in each program relative to the emphasis, theoretical base, focus, target group, curricula, methods of implementation etc.

The major approaches, as outlined in the literature, have been categorized into five general groups. Curriculum-based sex and HIV education programs implement abstinence-only and HIV/AIDS programs. Programs to improve contraceptive access, include family planning services, school-based health center programs and school condom-availability programs. Sex education programs include short educational programs designed to increase parent/child communication about sexual topics. Multi-component prevention programs contain two or more components such as classroom instruction, school-wide activities, provision of contraceptives, and media campaigns. Youth development programs are summer training and education programs (STEP) and youth incentive entitlement pilot projects (YIEPP) (Kirby, 1997).

An example of an evaluative study of curriculum-based sex and HIV education programs in Texas and California was conducted and reported by Eisen, Zellman, and McAlister in 1990. The study focused on 6 family planning service agencies, with two of

the programs located in one school district. The program sessions consisted of content which was theoretically based on the Health Belief Model and Social Learning Theory. The curriculum emphasis included factual material, values, feelings, decision-making, and skill building. Methods of instruction included lectures and discussion, role-playing, and films. Participant ages included 32% ages 13-14, 65% ages 15-17, and 3% ages 18-19. Males comprised 45% and females comprised 54% of the population studied. Ethnicity was reported as Hispanic 51%, Black 22%, White 17%, and other 10%. The design of the study was experimental, with random assignment of classes. The total sample size was N=888. Comparison classes received varied programs of equal duration to interventions. Matched questionnaire data was collected at baseline, immediate post-intervention, and 1-year follow-up. The analytic methods included logistic regression which controlled for background characteristics, as well as separate analyses for gender/sexually experienced and inexperienced.

The changes in outcomes for the groups which received intervention is as follows. Regarding the start of intercourse for those inexperienced at pre-test but initiating sexual activity by follow-up, participating males showed significant desirable change (40%) while for females there was no significant change (23%). Overall, there was no significant change in the initiation of intercourse.

Regarding adolescent contraceptive use for this same group, the results are included in the following discussion. For participating males there was no significant change in use of contraceptives from first intercourse to last intercourse, and there was no significant change in consistency of contraceptive use; females demonstrated a significant undesirable change at first intercourse and a significant undesirable change related to

consistency of contraceptive use. Results of participants experienced at pre-test related to contraceptive use include the following. Males showed no significant change related to last intercourse, but a significant desirable change related to consistent use of contraceptives. Females contraceptive use during last intercourse and the consistent use of contraceptives showed no significant change (Eisen, Zellman, & McAlister, 1990).

In critiquing this study, we see that immediately after intervention classes there seemed to be a positive significant change for males regarding the initiation of intercourse. There was no significant change among females. Relative to contraceptive use, among males there was no significant change and among females there was significant undesirable change. The results of the study therefore are mixed. There were some design problems identified including the combining of sample groups and small sample sizes, making validation and generalization difficult.

An example of an evaluative study of a school-based health center program which has been the program of choice in many communities was conducted by Kirby and others in 1993. The settings for this study were St. Paul, Minnesota school-based clinics with the sample being N=1, 838 to 2,988, depending upon the year. The students in the population were 9-12 graders, all females, with the age and ethnicity not being reported. The programs were in the high schools, and provided comprehensive health service, reproductive health care, contraceptive access at a special hospital clinic, and infant day care. The study design was quasi-experimental. In four schools, birth rates for 5 years before and 6 years after the clinics opened were compared. In one school, birth rates 2 years before and 3 years after the clinic opened were compared. Birth rates were estimated by matching school enrollment records and county birth certificates. Several

methods were used to compare pre-clinic and post-clinic birth rates. Tests of significance were conducted. For all studies, the significance level was set at $p < 0.05$. Change in outcome of birth rates for this study demonstrated no significant change.

This type of program is typical of the popular intervention programs which have been and continue to be implemented in many communities. In critiquing this study, some of the difficulties include the lack of comparison schools in the study, large year-to-year fluctuations in birth rates that may have obscured a small clinic impact, and the evaluation of only school-wide results, even though not all participant students used the clinics for contraceptive needs (Kirby, Resnik, Downes, Kocher, Gunderson, Pothoff, Zelterman, & Blum, 1993).

Recently, it has been reported that a study of a little known nationwide Teen Outreach Program has been implemented by psychologist Joseph Allen, and published in a national journal last month. According to this report, early results of 111 teens in Roanoke were 20 percent less likely to get pregnant or cause a pregnancy than their peers (Soriano, 1997). The program focuses on at-risk teens and tries to avoid the community controversies related to moral issues and contraceptive practices. The program is usually offered as an elective course at high schools and incorporates a classroom session where students learn life skills, sometimes with or without sex and contraceptive education. Study results were not evaluated in comparison with other programs, but the emphasis is on the idea of giving teens a sense of their own future, with hope as well as knowledge becoming the best contraceptive (Soriano, 1997).

The research evidence we have looked at seems to indicate that programs which focus on sexuality issues at least do not increase the adolescent pregnancy rate.

Other positive effects have not been demonstrated (Magura, Kang, & Shapiro, 1994; St. Lawrence, Jefferson, Alleyne, & Brasfield, 1995). Most of the educational programs looked at demonstrate some positive outcomes such as an increase in knowledge about being healthy related to sexuality.

It has been suggested in some studies that working to implement new clinic protocols specifically targeting adolescents might increase adolescent use of medical providers or improve contraceptive use. Other studies show no effect after trying this approach (Moore et al., 1995). School based clinic research is limited with inconsistent results; however, most authors believe it is essential to provide a strong educational framework along with providing contraceptives to adolescents in the effort to decrease the pregnancy rate (Kirby, Waszak, & Ziegler, 1991).

There is some indication in the research literature which shows that some of youth development programs may have had some effect related to decreasing adolescent pregnancy rates. Studies of multi-level programs and youth development programs also suggest some evidence that pregnancy or birth rates may decline as long as the program is actually in place (Kaye & Philliber, 1995). However, most of the data collected regarding the evaluation of these programs seems to indicate that there is no conclusive evidence about what works related to the attempts of health professionals to impact the adolescent pregnancy rates. Again, research data is limited, basically because there are simply too few studies to evaluate the different approaches. It is difficult to reach valid conclusions which are supported by a valid body of evidence due to these problems.

The bottom line remains that despite these intervention efforts in many communities, the teen pregnancy rate remains high. There is much public debate and conflict about the possible positive and negative consequences of different approaches to reducing adolescent pregnancy. Teen pregnancy is currently a hot issue, and is generating much national concern as well as initiating new proposals to fund new programs and implement new research in the effort to develop a clearinghouse for effective intervention programs which could be implemented to effectively reduce the teen pregnancy rate by the year 2005 (Cockney, 1997).

The effectiveness of this effort may depend upon the type of research which is planned for the future. It is felt by many professionals that discussions about these issues may be insufficient to actually change behavior or to aid in reducing sexual risk-taking behaviors among our adolescents (Kirby, 1997). The most current research done in this area (Kirby, 1997) projects the need for finding ways to motivate youth to improve their knowledge and skills, enabling them to be proactive in determining their life trajectory.

To date, very few research studies have attempted to qualitatively address the issue of teen pregnancy, where teens talk about their lives and issues, other than the use of focus groups by sociologists in the identification of the issue of contraceptive use by teens (Kisker, 1985). Questions have not been asked of adolescents about issues related to family relationships, connectedness, and communication. Studies have not looked at how these factors may affect the risk for adolescent pregnancy. The incorporation of adolescent developmental theory in teen pregnancy programs, population based research on specific cultural teen groups in the United States, as well as the use of the various

methods of qualitative research now being implemented in most fields is seriously lacking. The involvement of the nursing profession in research as well as in program development and implementation in the issue of teen pregnancy is very limited.

CHAPTER III

METHODOLOGY AND PROCEDURES

The design of the study, as well as methods used for implementation, are described in this chapter. The sample population, the data collection instruments, the data collection procedures, and the methods of data analysis are presented in a sequential format.

Design of the Study

The research design was that of a non-experimental descriptive study with utilization of a triangulated approach. The purpose and intent was to look at the perceptions of pregnant adolescents related to the overall quality of parent-adolescent communication and to relate them to the adolescent pregnancy. The theoretical framework for this study was based on adolescent and family development theory, family communication theory, and health-behavior theory. This design allowed for gathering data about a specific group of pregnant adolescents concerning perceived communication relationships and patterns within their family units prior to pregnancy, during pregnancy, and after pregnancy. The data was used to compare specific demographic variables of the pregnant adolescents with their perceptions, identified by subjects' PAC scores, and to help clarify meanings of the PAC scores by use of the verbal interviews. The goal of this non-experimental, descriptive, triangulated study was to describe relationships among the demographic variables and the PAC scores and to begin to understand from the perspective of pregnant adolescents how communication within families may affect early adolescent pregnancy patterns.

Description of the Sample

The target population for this study was all pregnant adolescents between the ages of 13-19 in the Banning/Beaumont area of southern California. Discussion of rationale for focusing on this population of pregnant adolescents follows.

Beginning during the mid 1970's United States and California birth rates to adolescents were approximately 51 to 53 births per 1,000 teens between the ages of 15-19. In 1996 California birth rates of 58.6 per 1,000 teens aged 15-19 was the lowest since 1987 and represented the largest single year birth rate decline in 25 years. In 1996 births to all teens in California were 64,603 and were broken down as follows: 39,071 to mothers aged 18 to 19, 24,047 to mothers aged 15-17, and 1,485 to mothers below age 15. Between 1995 and 1996 California had a 9.0% reduction in rate of births to teens in all but six of the 52 counties for which a 15-19 birth rate could be calculated (California Department of Health Services, 1996).

Banning, California is located in the San Geronio Pass Area, which has been identified as a high risk area for adolescent pregnancies, and showing a higher teenage birth rate than either the county or state. According to the California Health Department, (1996), the 1996 California birth rate is 58.6 per 1,000 teens aged 15-19. The Banning area teen birth rate was shown to be 94 births per 1,549 teens for mothers ages 15 to 18. The births for teens whose ages are less than 15 were 10 births per 2,943 teens. Births to teens between the ages of 18-20 were 165 per 1,121 teens (California Department of Health Services, 1996).

A Pass Area Child Health Care Collaboration was developed and coordinated by the superintendent of the Banning Unified School District to identify major community issues and to prioritize planning within the community to work towards meeting these needs. The major issues and needs identified by the community included teen parenting, substance abuse, academic achievement and drop out rates, gang issues, and the escalating incidence of child abuse.

One of the first steps taken by the collaboration was to write a proposal for a federal Family Preservation/Family Support/Teen Pregnancy grant for this area. In 1997 the school district submitted three grants including a Healthy Start Planning Grant for \$50,000 which was funded, the Federal Preservation/Family Support/Teen Pregnancy Grant for \$400,000 which was funded, and a California Wellness Foundation Grant which was not given (Federal Family Preservation/Family Support Grant Proposal, 1997).

The Family Preservation/Family Support/Teen Pregnancy Grant provided a double wide unit on the Banning High School Campus in which the Esperanza classes, or special education high school curriculum program for pregnant adolescents took place as well as optional communication and parenting classes for adolescents and their mothers offered outside of school hours.

The accessible population for this study included pregnant adolescents enrolled in the Esperanza program, located on the Banning High School campus, pregnant adolescents seeking obstetrical prenatal care from Rancho Paseo Medical Group in Banning, from pregnant adolescents seeking obstetrical prenatal care from Dr. Yoo at his

clinic in Banning, and from pregnant adolescents seeking obstetrical prenatal care from health care providers at the Family Care Center, in Banning, California.

Criteria for research participants included: a) pregnant girls between the ages of 13-19 b) students who spoke and read English without difficulty c) willingness to participate as demonstrated by signing a consent form and completing the research packet. After completion of the written work verbal permission was obtained from a portion of those who had completed the written packets to verbally discuss what they had written on the instruments.

A mid-range sample size of 50 subjects was identified for this descriptive, non-experimental, triangulated study which describes what was found within this specific population. The sample size was determined adequate based on discussions with statistical consultants for this type of study.

The timetable for the project designed was approximately nine months. Initial procedures of instrument clearance, agency clearance and consent, and development of the questionnaire packets took place in April/May 1998. Data collection took place from November 1998 through February 1999. Data analysis and evaluation was conducted between March 1999 and May 1999.

Instruments

A demographic questionnaire and two likert scale self-respondant instruments (PAC scales) comprised the questionnaire packet distributed to pregnant adolescents. A qualitative interview form was developed and used to guide the interview discussion. These instruments comprised the tools used to collect data for this study.

Demographic Questionnaire. The twenty item demographic questionnaire was developed with consideration to the theoretical framework and review of literature of the study and included variables which have been previously identified with the phenomena of teen pregnancy (See Appendix E).

The demographic questionnaire included questions related to race, location, age, date of birth, pregnancy status, marital status, language, first language learned, religion, church attendance, parents' marital status, income, household composition, use of birth control, type of birth control used, previous pregnancy experiences and outcomes, feelings about the pregnancy and care of the baby, and type of health care insurance utilized. Option responses for each item are numbered as they were coded in the database (see Appendix E). This basic information is important to consider when attempting to understand the sexual practices of the pregnant adolescents and use of birth control, which has already been correlated in the literature with pregnancy risk.

The independent variables as identified in the demographic questionnaire of this study were named and operationalized as follows based on self reporting of the subjects:

- **Location:** indicates the specific research site where a subject's testing took place and included Banning High School campus, Dr. Yoo's clinic, Family Care Center, and Rancho Paseo Medical Group clinic.
- **Race:** indicates the subjects' ethnicity or race. Options given included African-American, Asian, Caucasian/Indian, Caucasian, Hispanic, Hmong, Native-American, and other.
- **Age:** indicates the subjects' chronological age in years from age 13 to age 19 inclusive.

- **Birthdate**: indicates the specific date of birth of subject as written into the demographic questionnaire by each subject.
- **Pregnancy status**: indicates the current pregnancy status of the subject. Either the subject is currently pregnant for the first time, or the subject is currently pregnant and has had a baby sometime in the past.
- **Marital status**: indicates the current legal marital status of the subject. The subject was asked to identify current marital status as either “married” or “single and/or engaged.”
- **Language**: indicates the primary language currently used by the subject when communicating at home. Options given included “English”, “Spanish,” or “other.”
- **First language**: indicates the first language learned as a child by the subject and included the responses “English,” “Spanish,” or “Other.”
- **Religion**: indicates the formal religious body the subject identifies with including “Catholic,” “Protestant,” “Other,” “None.”
- **Church attendance**: indicates the patterns of regularity of church attendance by answering in terms of frequency of attendance to the following responses: “always,” “sometimes,” “holidays,” “never.”
- **Mom’s marital status**: indicates current legal marital status of subjects’ mother including “married,” “single/engaged,” “divorced,” “widowed,” “deceased,” “deceased/grandmother raised me.”
- **Dad’s marital status**: indicates current legal marital status of subjects’ father including “married,” “single/engaged,” “divorced,” “widowed,” “deceased.”

- **Income**: indicates available annual household financial support with the following categories: “\$10,000-14,999,” “\$15,000-19,999,” “\$25,000-49,000,” “less than \$10,000,” “I don’t know my income,” “I don’t want to say.”
- **Household composition**: indicates identification of all individuals currently living with the subject at the principal residence including “husband/boyfriend,” “both parents,” “mother only,” “father only,” “a combination of the above” “other people.”
- **Birth control**: indicates use of any type of birth control at any time by subject including the responses “I don’t use any birth control,” “I have used some type of birth control.”
- **Birth control type**: indicates specific birth control methods previously used by subject including “birth control pills,” “condoms,” “depro-provera shots,” “rhythm or natural method,” “something else.”
- **Previous pregnancy**: indicates identification of the number of previous pregnancies experienced by the subject. Specific numbers were written in by the subject on the demographic questionnaire.
- **Pregnancy feelings**: indicates the feelings of the subject related to the current pregnancy including “happy,” “unhappy,” “I have mixed feelings,” “I am not sure how I feel.”
- **Baby care**: indicates the feelings of the subject related to the subjects ability to care for a baby by responding “yes,” “no,” “I am not sure.”
- **Type of insurance**: indicates the subjects’ current status related to medical insurance and/or ability to pay for prenatal care by responding to the following options: “Medical/CPSP,” “HMO program,” “another type of insurance,” “I don’t know.”

Parent-Adolescent Communication Scale. The PAC was selected to assess adolescent perceptions of the overall quality of communication (See Appendices F,G). The PAC is one scale of the Family Inventories Project developed by Olson et al., (1985) and is based on the Circumplex Model of Marital and Family Systems (Olson et al., 1985). The goal of the developers was to design a tool which would aid researchers to describe parent-adolescent communication in a variety of family types and to identify a diversity of experiences within different family units. The PAC was designed to measure parent-adolescent communication with a twenty item Likert type scale where higher scores indicate a greater degree of openness and fewer problems in family communication. Instrument clearance was obtained from Dr. Olson at the University of Minnesota before use of the PAC instrument. The PAC has been described as having internal and external validity consistently, with test-retest reliability = .78 and internal consistency, Cronbach's alpha = .91. In testing early construct validity, data was analyzed from the pilot study using factor analysis methods such as principal factoring with iterations and varimax rotation. The minimum eigen value was shown to be 1.0 (Olson et al., 1985).

The main categories were seen as open family communication, problems in family communication, and selective communication (Olson, 1985).

The Parent Adolescent Communication instrument has been used in various published studies to identify the perception of parent-adolescent communication from the perspective of the adolescent. The scales measure both positive and negative aspects of communication as well as some content and process of the parent-adolescent interactions. Subjects in the pilot study included adolescents from college, university, and high school levels. Responses were received from 433 subjects. Of these 127 were of high school

age and 306 were from college and university classes. Students in the sample came from four different locations in Minnesota and Wisconsin, with the majority of the subjects falling in the 16-20 age range (Olson et al., 1985).

The instrument scale demonstrates two sub-scales. The first sub-scale focuses on open family communication which emphasizes responses regarding the open exchange of both factual and emotional information between parents and adolescents, as well as including the degree of satisfaction experienced during the interactions. The second sub-scale focuses on problems in family communication including responses regarding a hesitancy to share information, negative styles of communication interaction, and the need for selectivity and caution in what is shared between parents and adolescents.

There are three forms to the complete instrument including the parent form, the adolescent-father form, and the adolescent-mother form. All three forms have been individually normed with separate scores, making the various forms accurate for use separately and individually. From the PAC tool, only the adolescent-father and the adolescent-mother forms were used in obtaining responses from pregnant adolescent girls in this study.

The total PAC score norms, which were used as the control-group data for parent-adolescent communication are the following, and are reported in percentiles by score with a possible range score of 20-100. For adolescents related to their mothers, the mean score is 66.56, standard deviation 12.10, range 65, skew -.076, kurtosis -.002, n417. For adolescents related to their fathers, the mean score is 63.74, standard deviation 12.02, range 67, skew -.047, kurtosis .137, N417.

Qualitative Interview Guide. An interview guide consisting of six open-ended questions was developed for the semi-structured interviews (See Appendix H). After the first two interviews, the first question was revised to connect the written tools which had just been completed more easily, by asking “What did you think about the questions you just answered about communicating with your father and mother?” The second question was revised also slightly to combine the original questions one and two with the following statement: “What was it like communicating with your parents when you were growing up and before you got pregnant and what is it like communicating with your parents now?” The intent was to allow for clarification of the responses previously recorded in the written packet related to adolescent perceptions of communication with both father and mother. These questions seemed to be useful in eliciting the adolescent’s experience with communication patterns within their family units before, during, and in some cases after pregnancy. The narrative given by the subjects formed the basis for the interviews. The stories unfolded well with some encouragement for elaboration and clarification, generally without hesitation. The basic purpose of the interview guide was to ensure consistency among the interviews.

Protection of Human Subjects

The study proposal was submitted to the University of San Diego’s Committee on the Protection of Human Subjects for approval in time for the June 30, 1998 meeting (See Appendix A). A few corrections were identified and the proposal was resubmitted and approved at the next Human Subjects Committee meeting in September 1999 pending corrections (See Appendix A). Potential physical, psychological, or social risks

included the risks of subject embarrassment or becoming emotionally upset. A plan was in place that if such a situation occurred, the subject would immediately be referred to the clinic counselor at each site. Every effort was made to limit potential risks to subjects participating in the study.

A complete informed consent was obtained from each subject and was available for each parent/guardian. Verbal explanation was carefully provided to each subject and parent/guardian along with the written forms. The primary researcher was present to answer any questions related to informed consent. Each subject was assigned a coded number, which included only initials. No full names were revealed in any way, in the attempt to ensure confidentiality. During the study, subjects were given the opportunity to drop out at any time without reprisal.

None of the subjects who began the study dropped out of the study. No identified physical, psychological, or social risks such as embarrassment or upset emotions occurred at any time during the data collection. There were no financial implications for the subjects in the study.

Data Collection Procedures

The data collection procedures were carried out in the following manner. Permission and specific operating procedures for the collection of data in each facility was initially obtained. At the Banning Unified School District Office discussions were conducted with the superintendent, the high school principal, the director of the Family Preservation/Family Support/Teen Pregnancy Grant, and the teacher of the Esperanza school. Letters of information along with a parent/guardian consent form and a subject

consent form were sent home with pregnant adolescent girls in the Esperanza school two weeks before the collection of data. These were collected by the teacher and turned over to the researcher. On two different occasions, at a day and time specified by the teacher as convenient, for a period of 3-4 hours data collection took place. The written instruments were completed as a group in the classroom setting. As each subject turned in the completed instruments, she was asked if she would be willing to be interviewed by the researcher. If permission was obtained, the researcher and subject left the classroom and went next door to a private office where the subject could talk with the researcher about feelings and concerns related to the written instruments. The data in the interviews was collected either by audiotape or by written notes taken by the researcher, according to the subjects' preference.

At Rancho Paseo Medical Group, Dr. Yoo's clinic, and the Family Care Center permission and details were worked out with each administrator, the Physicians, as well as all involved office staff. Scheduled prenatal appointments of adolescent subjects were initially identified. Subjects were asked in advance by staff members if they would be willing to participate in the research study. If they agreed, the researcher would meet with the subject following the prenatal appointment, explain the research, answer questions, and obtain the consent forms. The packets included consent forms for both parents/guardians who were present and participating subjects (see Appendix C).

The same format for data collection utilized at the high school location was followed in all clinic sites in which the subjects initially completed the written instruments followed by a request for a private interview with the researcher.

Total N= 56 for all four sites sampled. Thirty of N=56 subjects agreed to verbally discuss their family communication patterns in an interview with the researcher. Twenty-seven of these interviews were captured verbatim on audiotape. Three subjects refused to audiotape their interviews, but requested instead that the researcher utilize written notes to summarize the main ideas and concepts identified by the subjects.

All subjects were informed the written questionnaire packets would take approximately twenty minutes to complete. The length of time of subject interviews varied dependent upon subject willingness to share information. The range of interview time was about ten to thirty minutes in duration.

The primary researcher was personally available and involved with each subject in each location to answer questions and clarify information as needed. Each potential subject had the right to refuse or to withdraw from the study at any time.

Data Analysis Procedures

This descriptive, non-experimental, triangulated design included the following methods of data analysis. All quantitative data was entered and analyzed utilizing the personal computer version of the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were generated for all quantitative data, including central tendency distributions of mean, median and mode, standard deviation with upper and lower data points identified from scores on the Likert scale-like instrument, and graphic portrayal of data points prepared and examined for variance, skewness, kurtosis, and range for each demographic variable. Individual raw scores from the PAC instrument scales reflecting adolescent perceptions of adolescent-father communication and adolescent

perceptions of adolescent-mother communication were converted to percentile scores and then compared with the PAC normed instrument scores.

Each demographic variable was also described within the context of the individual communication scores of both PAC Likert scale forms, including the adolescent-father form score and the adolescent-mother form score.

Descriptive correlation was conducted utilizing Pearson correlation with the demographic variable “age” of the pregnant adolescent with adolescent-mother and adolescent-father PAC scores at a significance level of $p = <0.05$.

A t-test was conducted between the adolescent PAC scores related to their mothers and the adolescent PAC scores related to their fathers.

Qualitative data analysis included the transcription of field notes and audiotaped interviews which was used as the text that was analyzed. Data analysis began simultaneously with data collection, with interpretation beginning with the first interview.

Steps in this process included reading the text in its entirety, making notes and formulating questions, the formation of initial impressions and interpretations, and getting a feeling for the whole interview. Recurring themes emerged from the basic interpretations as the interviews continued.

Data from the audiotaped, transcribed interviews was coded and analyzed, with identification of emerging themes. These are illustrated on Table 56 along with specific examples cited to illustrate the themes. This data assisted in clarification of the quantitative findings and helped in the further analysis of the PAC scores in answering questions related to the numerical score results as well as raising new untested questions.

Threats to Internal Validity

This non-experimental descriptive study did not attempt to correlate relationships relative to the perceived quality and effectiveness of parent-adolescent communication and the current pregnancy. Caution was exercised in describing the results of scoring, comparison of scores with demographics, and drawing conclusions from them.

Only subjects meeting the outlined criteria set for participation (i.e. were between the ages of 13-19, were able to speak and read English without difficulty, and were willing to participate in the study) were considered to be participants in the study. The findings of this study were considered to be exploratory and specific to the population in the Banning/Beaumont area of California. They are preliminary findings which are not intended to be used for making program changes related to teen pregnancy prevention. Descriptive statistics identified a picture of the demographic variables specific to this population. Instrument scores were compared to the standardized instrument scale. Some instrumentation threats may have been present during the qualitative, interview portion of the study, due to the open-ended interview guide which was used. Some questions may have been asked and/or understood differently among subjects.

Threats to External Validity

Threats to external validity include the following: a non-representative sample, other effects such as the Hawthorne effect, and the experimenter or Rosenthal effect (Hinkle, Wiersma, & Jurs, 1994). The sample was nonrandom, specifically limited and selected based on convenience criteria demonstrating adolescent pregnancy. The

results described only a portion of the groups of pregnant adolescents who attended the Banning High School Esperanza Program, or who received prenatal care at Dr. Yoo's clinic, Rancho Paseo Medical Group, or the Family Care Center. This sample represented only a portion of the target population (all pregnant adolescents in the Banning/Beaumont, California area). Not all pregnant adolescents are in contact with either the school system or health care providers, and therefore not available to be part of the study sample.

The Hawthorne effect may have been present to some extent in the classroom or clinic settings due to the presence of the investigator, even though the investigator tried to be low-key throughout the process. It is possible that the external threat of social desirability may have been present in responding to the Likert scale responses and in answering the interview questions. Some adolescents may have tried to give responses which were thought to be what the investigator was looking for.

The Rosenthal or "experimenter" effect may have had an impact on the study in that the investigator was present during the entire exchange. The investigator asked each subject for permission to participate in the study, helped answer questions related to the written instruments during the actual process, and guided narrative discussions during the interview process. The investigator worked hard to remain neutral, unbiased, and to withhold judgment verbally and non-verbally when interacting with each subject.

In summary, threats to internal and external validity were considered when designing the study and selecting the sample and instruments. The researcher attempted to minimize bias throughout the study. This investigation into pregnant adolescents' perception of communication between themselves and their parents was targeted towards

contributing new knowledge in the area of adolescent health. This non-experimental, descriptive study attempted to identify relationships between the study variables which have not been previously described.

Limitations of the Study

Some of the limitations of the study include the non-random selection of subjects within the identified population and the difficulty on the part of some adolescents to completely understand how to answer the questions on the likert scale, as evidenced by the asking for clarification while completing the instrument. Also, the PAC was normed on high school and college students in Minnesota and Wisconsin. This tool has not been used with a sample of adolescent girls only, or with a pregnant adolescent population. Pregnant adolescents who may have felt unidentified pressure to participate in the study may have responded in inaccurate ways. Replication of the study should be carried out prior to generalization to other pregnant adolescents.

Time constraints on the part of the investigator to complete the study was a limitation. Data collection could have been continued over a longer time period, obtaining a larger, more accurate sample.

The partial use of the PAC instrument was a limitation. Expanding the study to utilize the entire PAC instrument including parents perceptions of parent-adolescent communication would have made the study more meaningful and complete.

CHAPTER IV

PRESENTATION AND DISCUSSION OF FINDINGS

This chapter presents the results of the data analysis from this study. The data is presented in five sections. The first section provides an item by item description of the sample related to each demographic variable. Section two gives a descriptive comparison and interpretation of the sample PAC scores with the PAC instrument normed scores. Section three presents a descriptive item by item comparison of demographic variables with adolescent-mother and adolescent-father PAC scores. Section four describes specific quantitative statistical tests run on the data. Section five provides a descriptive analysis and comparison of the qualitative interview data. The interview data will be used to clarify and increase understanding of the quantitative data results.

Description of the Sample

In describing the sample population of this study, frequencies and descriptive statistics will be reported for each demographic variable or characteristic. The sample size was N=56 pregnant adolescent girls recruited from four different sites in the Banning/Beaumont area of southern California.

Table 1 provides a summary description of the demographic characteristics of the subjects along with the number of respondents and missing respondents for each characteristic. This data provides an overview of the demographic questionnaire data for this study. Each demographic variable will be discussed individually.

Table 1. Summary Description of the Demographic Characteristics of Pregnant Adolescents and the Number of Respondents for Each Characteristic.

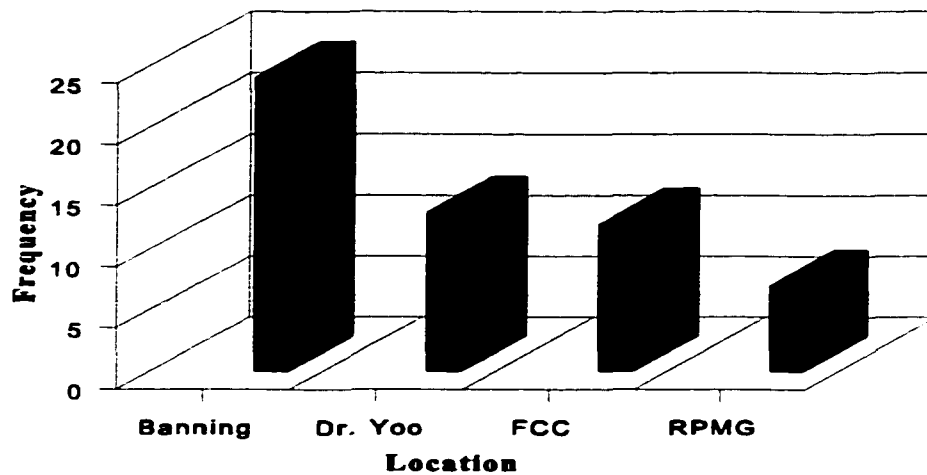
VARIABLES	VALID	MISSING
Location	56	0
Ethnicity	56	0
Age	56	0
Birth Date	56	0
Pregnancy Status	56	0
Marital Status	55	1
Language	56	0
First Language	56	0
Religion	56	0
Church Attendance	56	0
Mother's Marital Status	56	0
Father's Marital Status	56	0
Household Income	56	0
Household Composition	56	0
Birth Control	56	0
Birth Control Type	56	0
Previous Pregnancy	56	0
Pregnancy Feelings	56	0
Baby Care	56	0
Type of Insurance	56	0

Location. Table 2 provides a description of the demographic characteristic “location” of pregnant adolescents using frequency. All fifty-six of the subjects responded to this item on the demographic questionnaire. Twenty four of the participants (42.9%), or the majority of the sample, were located at the Esperanza program of the Banning High School campus. Thirteen participants (23.2%) were located at Dr. Yoo’s clinic in Banning. Twelve participants (21.4%) were located at the Family Care Center in Banning. Seven participants (12.5%) were located at Rancho Paseo Medical Group in Banning. Figure 1 provides a graphic representation of this characteristic.

Table 2. Description of Demographic Characteristic Location of Pregnant Adolescents Using Frequency

Location	Frequency	Percent	Valid Percent	Cumulative Percent
Banning High School	24	42.9	42.9	42.9
Dr. Yoo’s Clinic	13	23.2	23.2	66.1
Family Care Center	12	21.4	21.4	87.5
Rancho Paseo Medical	7	12.5	12.5	100.0
Total	56	100.0	100.0	---

Figure 1. Histogram of Demographic Characteristic Location of Pregnant Adolescents

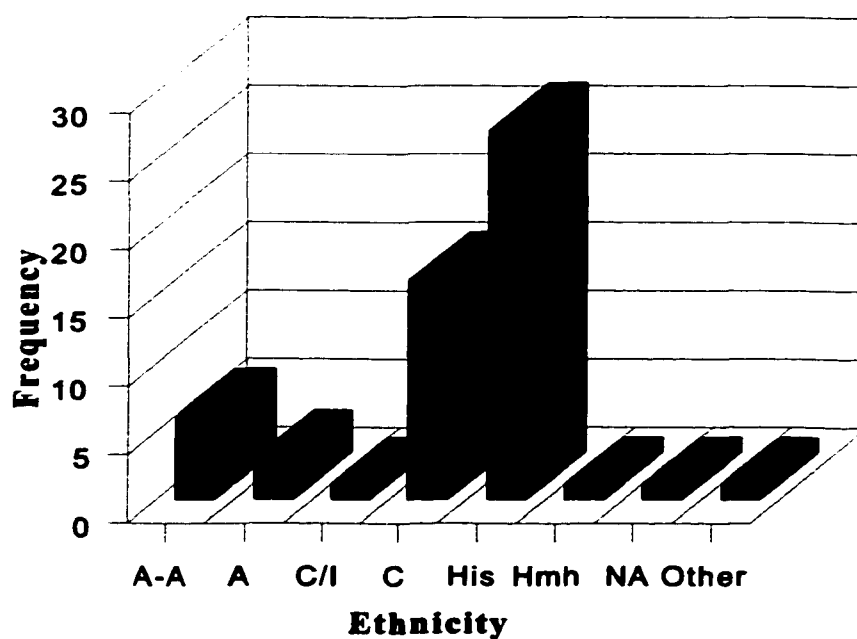


Ethnicity. Table 3 provides a description of the demographic characteristic “ethnicity” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. Six participants (10.7%) were identified as African-Americans. Three participants (5.4%) were identified as Asian. One participant (1.8%) was identified as Caucasian/Indian. Sixteen participants (28.6%) were identified as Caucasian. The majority of the sample, twenty-seven participants (48.2%) were identified as Hispanic. One participant (1.8%) was identified as Hmong. One participant (1.8%) was identified as Native American. One participant (1.8%) was identified as other, which was not further delineated. Figure 2 provides a graphic representation of this characteristic.

Table 3. Description of Demographic Characteristic Ethnicity of Pregnant Adolescents Utilizing Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
African-	6	10.7	10.7	10.7
Asian	3	5.4	5.4	16.1
Caucasian/India	1	1.8	1.8	17.9
Caucasian	16	28.6	28.6	46.4
Hispanic	27	48.2	48.2	94.6
Hmong	1	1.8	1.8	96.4
Native American	1	1.8	1.8	98.2
Other	1	1.8	1.8	100.0
Total	56	100.0		

Figure 2. Histogram of Demographic Characteristic Ethnicity of Pregnant Adolescents



Age. Table 4 provides a description of the demographic characteristic “age” of pregnant adolescents utilizing frequency. All fifty-six of the subjects responded to this item on the demographic questionnaire. Two participants (3.6%) identified their age as being 14. Seven participants (12.5%) identified their age as being 15. Twelve participants (21.4%) identified their age as being 16. Eight participants (14.3%) identified their age as being 17. Thirteen participants (23.2%) identified their age as being 18. Fourteen participants (25%) identified their age as being 19. The majority of the sample adolescents were in their middle to late teen years. Figure 3 provides a graphic representation of this characteristic. Table 5 provides a description of the demographic characteristic “age” of pregnant adolescents utilizing descriptive statistics. The mean is 17.16, the median 17.0, and the mode 19 (SD = 1.51).

Table 4. Description of Demographic Characteristic Age of Pregnant Adolescent Utilizing Frequency

	Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14	2	3.6	3.6	3.6
	15	7	12.5	12.5	16.1
	16	12	21.4	21.4	37.5
	17	8	14.3	14.3	51.8
	18	13	23.2	23.2	75
	19	14	25	25	100.0
Total	---	56	100.0	100.0	---

Figure 3. Histogram of Demographic Characteristic Age of Pregnant Adolescents

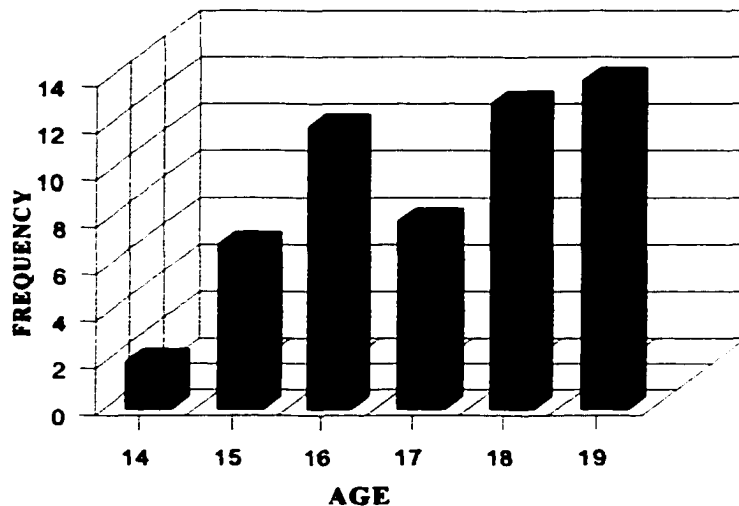


Table 5. Description of Demographic Characteristic Age of Pregnant Adolescents Utilizing Descriptive Statistics

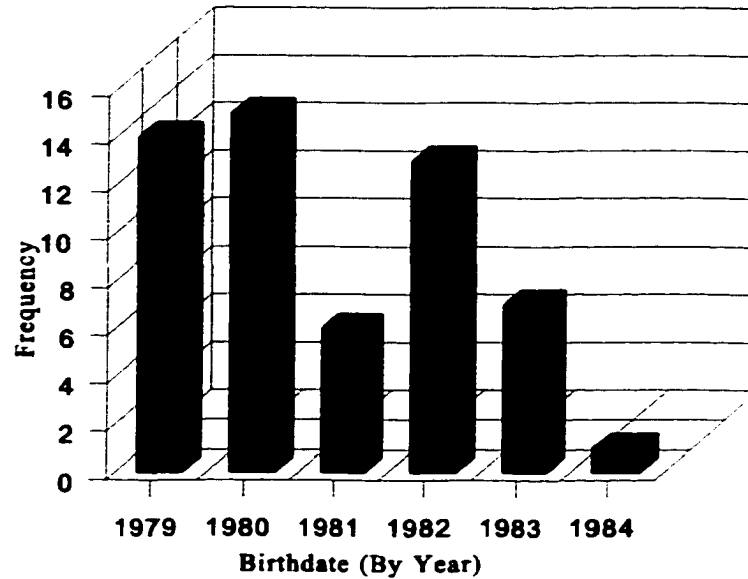
Number Valid	56
Missing	0
Mean	17.16
Median	17.00
Mode	19
Standard Deviation	1.51
Variance	2.28
Skewness	-0.316
Standard Error of Skewness	0.319
Kurtosis	-1.067
Standard Error of Kurtosis	0.628
Range	5

Birth-date. Table 6 provides identification of specific subject birth-dates. All fifty-six subjects responded to this item on the demographic questionnaire. Birth-dates ranged from the years 1979 through 1984. Fourteen participants (25%) identified their birth-dates in the year 1979. Fifteen participants (27%) identified their birth-dates in the year 1980. Six participants (11%) identified their birth-dates as being in the year 1981. Thirteen participants (23%) were born in 1982. Seven participants (13%) were born in 1983. One participant (1.8 %) was born in 1984. Figure 4 provides a graphic portrayal of this characteristic.

Table 6. Description of Demographic Characteristic Birth-date of Pregnant Adolescents Utilizing Frequency

Birth-date (By Year)	N	Percent
1979	14	25%
1980	15	27%
1981	6	11%
1982	13	23%
1983	7	13%
1984	1	1.8%

Figure 4. Histogram of Demographic Characteristic Birth-date of Pregnant Adolescents

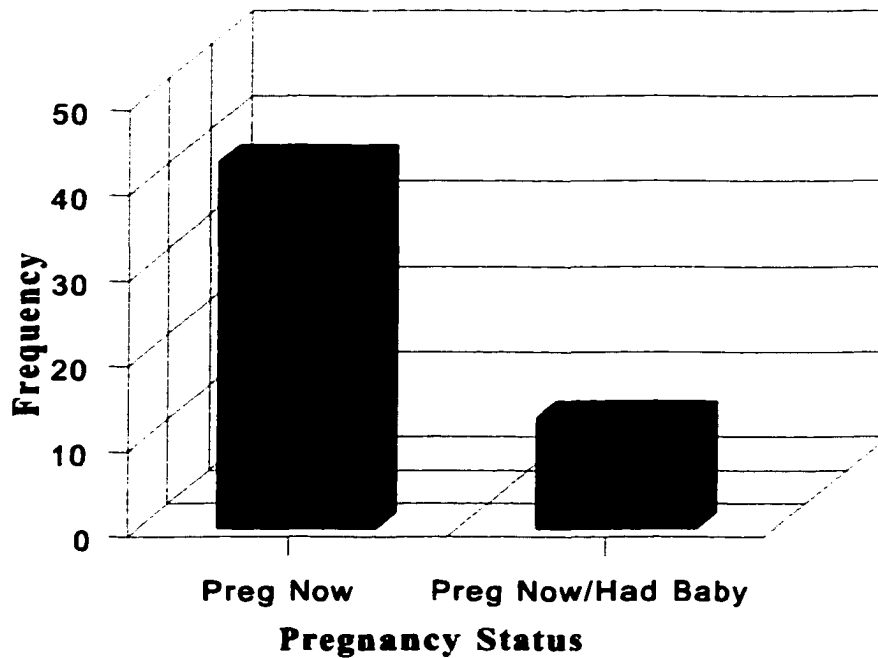


Pregnancy status. Table 7 identifies the current “pregnancy status” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. All participants were pregnant at the time of the interview. The number of clients pregnant with their first child was 43 (76.8%). The number of clients who had previous pregnancies was 13 (23.2%). Figure 5 provides a graphic representation of this characteristic.

Table 7. Description of Demographic Characteristic Pregnancy Status of Pregnant Adolescents Utilizing Frequency

	Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I Am Pregnant Now	43	76.8	76.8	76.8
	I Was Pregnant/Had	13	23.2	23.2	100.0
Total	---	56	100.0	100.0	---

Figure 5. Histogram of Demographic Characteristic Pregnancy Status of Pregnant Adolescents



Marital Status. Table 8 provides a description of the demographic characteristic “marital status” of pregnant adolescents utilizing frequency. Fifty-five out of fifty-six subjects responded to this item on the demographic questionnaire. One participant (1.8%) did not complete this item on the demographic questionnaire and was considered “missing.”

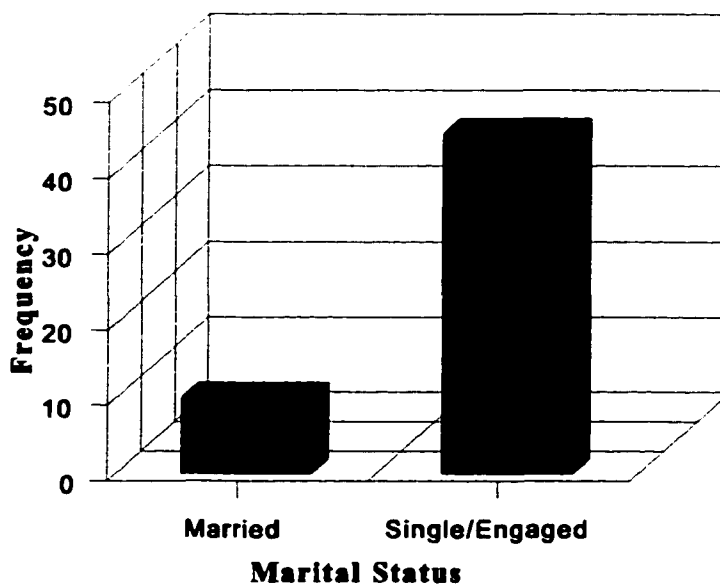
Ten participants (17.8%) indicated their current marital status to be “married.”

Forty-five participants (80.4%) indicated their current marital status to be “single and/or engaged.” Figure 6 provides a graphic portrayal of this characteristic.

Table 8. Description of Demographic Characteristic Marital Status of Pregnant Adolescents Utilizing Frequency

	Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	10	17.9	18.2	18.2
	Single/Engaged	45	80.4	81.8	100.0
	Total	55	98.2	---	---
	Missing	1	1.8	---	---
Total	---	56	100.0	100.0	---

Figure 6. Histogram of Demographic Characteristic Marital Status of Pregnant Adolescents



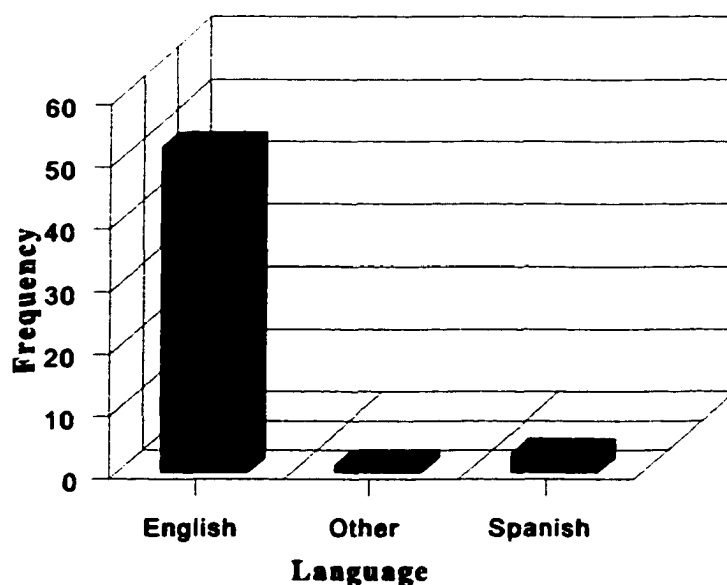
Language. Table 9 provides a description of the demographic characteristic “language” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. The majority of the sample, fifty-two participants (92.9%) identified their current primary language of use as “English.” Three participants (5.4%) identified “Spanish” as the primary language used. One participant (1.8%) indicated “other” as the primary language used and wrote in beside it “Hmong.”

Figure 7 provides a graphic portrayal of this demographic characteristic.

Table 9. Description of Demographic Characteristic Language of Pregnant Adolescents Utilizing Frequency

	Language	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	52	92.9	92.9	92.9
	Other	1	1.8	1.8	94.6
	Spanish	3	5.4	5.4	100.0
Total	---	56	100.0	100.0	---

Figure 7. Histogram of Demographic Characteristic Language of Pregnant Adolescents

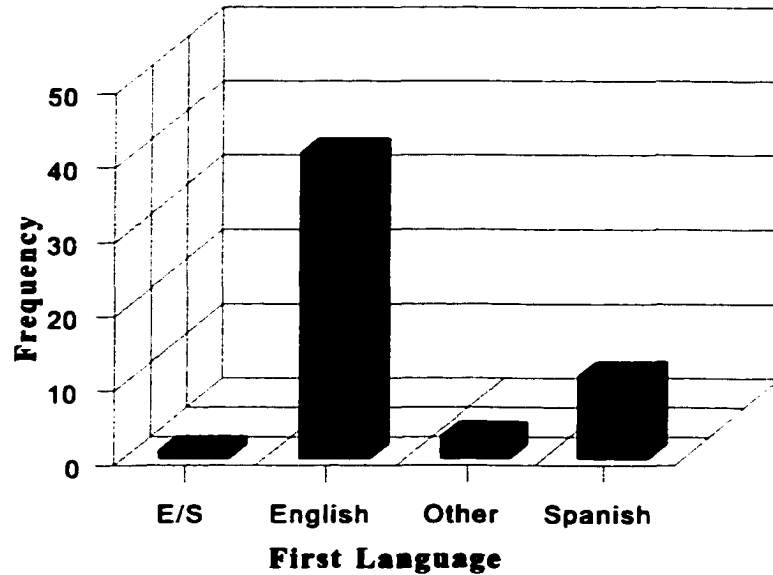


First Language. Table 10 provides a description of the demographic characteristic “first language” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. One participant (1.8%) indicated her first language to be English and Spanish simultaneously. The majority of the sample, forty-one participants (73.2%) indicated that “English” was the first language they learned as a child. Eleven participants (19.6%) indicated “Spanish” as their language of origin. Three participants (5.4%) indicated “other” as the language first learned as a child. The “other” category was not further defined by any of the respondents. Figure 8 portrays a graphic representation of this demographic characteristic.

Table 10. Description of Demographic Characteristic First Language of Pregnant Adolescents Utilizing Frequency

	First Language	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English/Spanish	1	1.8	1.8	1.8
	English	41	73.2	73.2	75.0
	Other	11	19.6	19.6	96.4
	Spanish	3	5.4	5.4	100.0
Total	---	56	100.0	100.0	---

Figure 8. Histogram of Demographic Characteristic First Language of Pregnant Adolescents

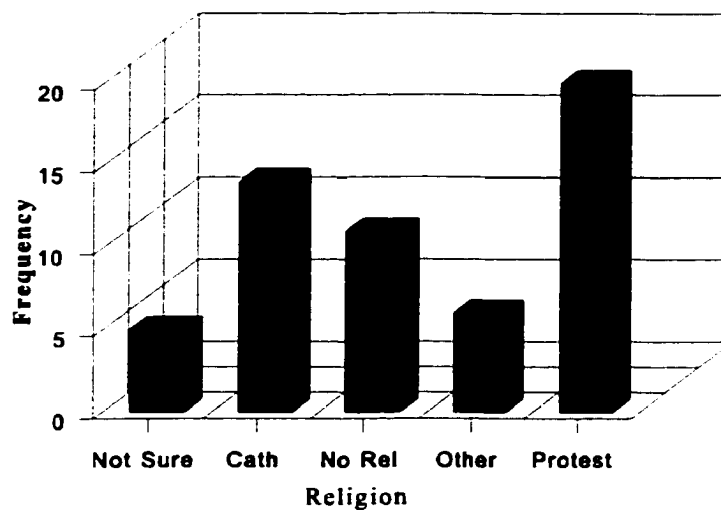


Religion. Table 11 provides a description of the demographic characteristic “religion” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. Five participants (8.9%) responded “not sure” when asked about their religious preference. Fourteen participants (25%) identified their religious preference as “Catholic.” Eleven participants (19.6%) identified their religious preference as “none.” Twenty participants (35.7%) identified their religious preference as “Protestant.” Six participants (10.8%) identified their religious preference as “other.” “Other” was not further identified by any of the respondents. Figure 9 graphically portrays this characteristic.

Table 11. Description of Demographic Characteristic Religion of Pregnant Adolescents Utilizing Frequency

	Religion	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Sure	5	8.9	8.9	8.9
	Catholic	14	25.0	25.0	33.9
	No Religion	11	19.6	19.6	53.6
	Other	6	10.7	10.7	64.3
	Protestant	20	35.7	35.7	100.0
Total	---	56	100.0	100.0	---

Figure 9. Histogram of Demographic Characteristic Religion of Pregnant Adolescents

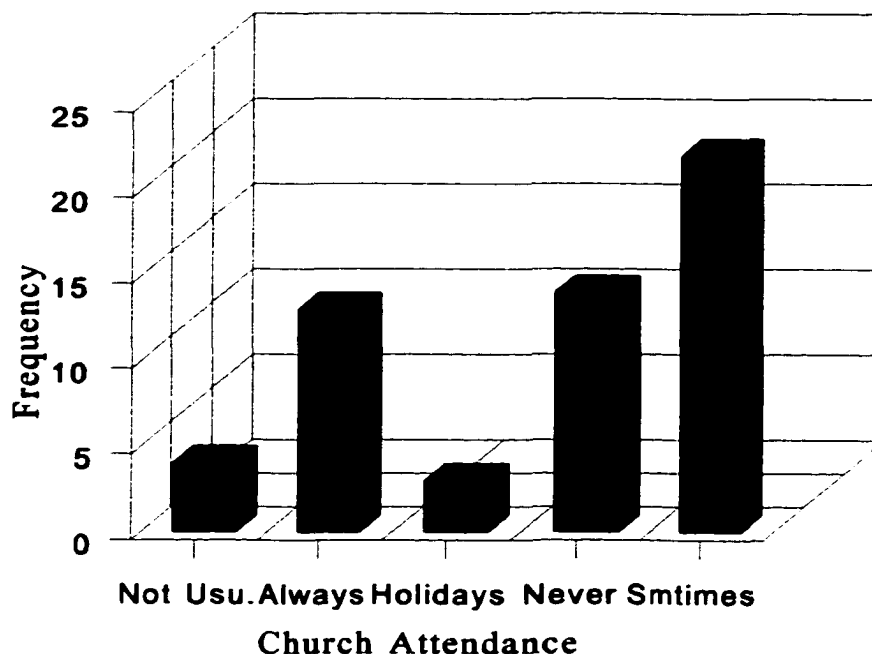


Church Attendance. Table 12 breaks down the description of the demographic characteristic “church attendance” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. Four participants(7.1%) responded to this item as “I don’t usually attend.” Thirteen participants (23.2%) identified their patterns of church attendance as “I always attend.” Three participants (5.4%) identified their patterns of church attendance as “I attend on holidays.” Fourteen participants (25.0%) identified church attendance patterns as “I never attend.” Twenty-two participants (39.3%) identified their patterns of church attendance as “I sometimes attend.” Figure 10 graphically portrays this characteristic.

Table 12. Description of Demographic Characteristic Church Attendance of Pregnant Adolescents Utilizing Frequency

	Church Attendance	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I Don’t Usually	4	7.1	7.1	7.1
	I Always Attend	13	23.2	23.2	30.4
	I Attend on Holidays	3	5.4	5.4	35.7
	I Never Attend	14	25.0	25.0	60.7
	I Sometimes Attend	22	39.3	39.3	100.0
Total	---	56	100.0	100.0	---

Figure 10. Histogram of Demographic Characteristic Church Attendance of Pregnant Adolescents

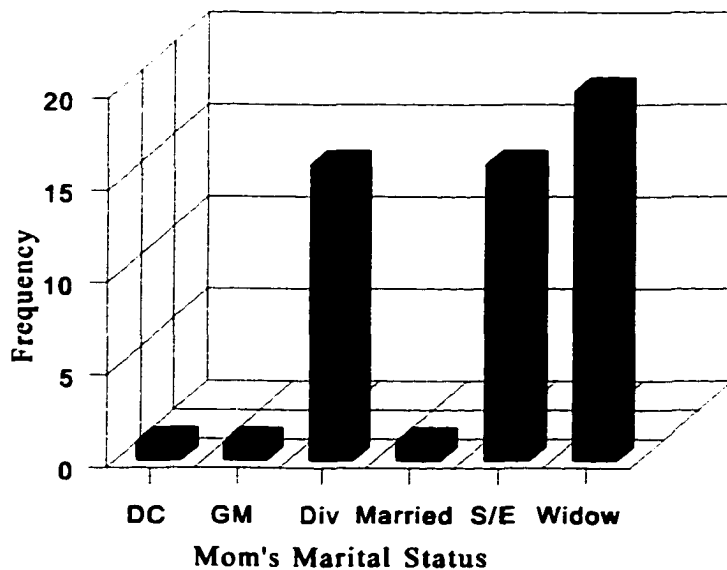


Mother's Marital Status. Table 13 provides a description of the demographic characteristic "mother's marital status" of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. One participant (1.8%) responded that her mother is deceased. One participant (1.8%) responded that her mother has been deceased since infancy, with a grandmother taking the place of her mother. Sixteen participants (28.6%) identified their mother's current marital status as "divorced." One participant (1.8%) reported mother's marital status as "married." Sixteen participants (28.6%) reported mother's marital status as "single/and or engaged." Twenty participants (35.7%) reported mother's marital status as

Table 13. Description of Demographic Characteristic "Mother's Marital Status" of Pregnant Adolescents Utilizing Frequency

	Mom's Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deceased	1	1.8	1.8	1.8
	Deceased/Grandmother	1	1.8	1.8	3.6
	Divorced	16	28.6	28.6	32.1
	Married	1	1.8	1.8	33.9
	Single/Engaged	16	28.6	28.6	62.5
	Widowed	20	35.7	35.7	98.2
	I Don't Know	1	1.8	1.8	100.0
Total	—	56	100.0	100.0	—

Figure 11. Histogram of Demographic Characteristic "Mother's Marital Status" of Pregnant Adolescents

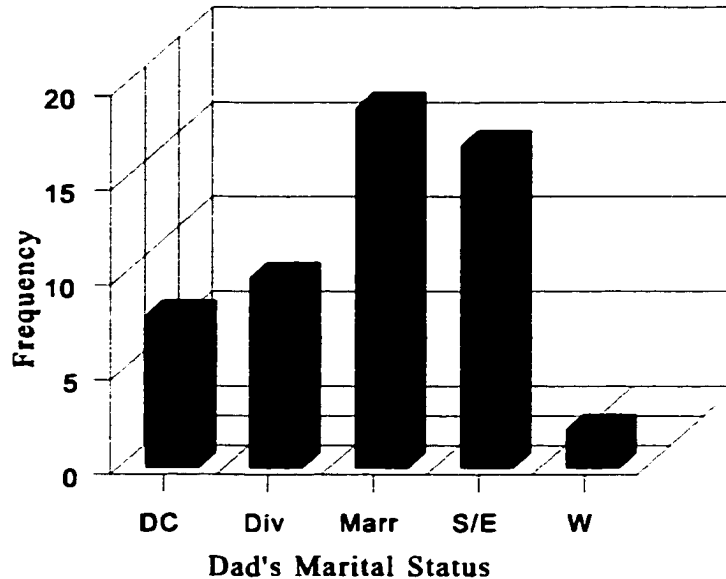


Father's Marital Status. Table 14 provides a description of the demographic characteristic "father's marital status" of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. Eight participants (14.3%) identified their father's marital status as "deceased." Ten participants (17.9%) identified their father's marital status as "divorced." Nineteen participants (33.9%) identified their father's current marital status as "married." Seventeen participants (30.4%) identified their father's marital status as "single and/or engaged." Two participants (3.6%) identified their father's marital status as "widowed." Figure 12 graphically portrays this characteristic.

Table 14. Description of Demographic Characteristic Father's Marital Status of Pregnant Adolescents Utilizing Frequency

	Dad's Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deceased	8	14.3	14.3	14.3
	Divorced	10	17.9	17.9	32.1
	Married	19	33.9	33.9	66.1
	Single/Engaged	17	30.4	30.4	96.4
	Widowed	2	3.6	3.6	100.0
Total	---	56	100.0	100.0	---

Figure 12. Histogram of Demographic Characteristic Father's Marital Status of Pregnant Adolescents

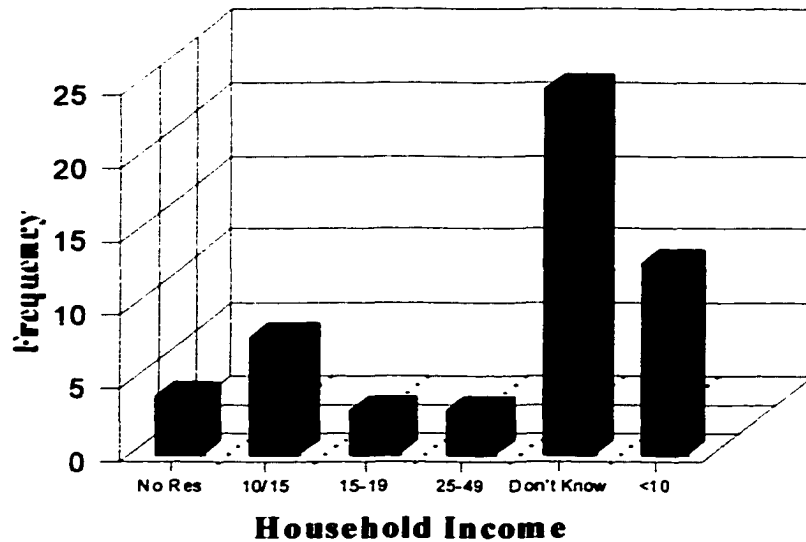


Household Income. Table 15 gives a description of the demographic characteristic “household income” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. Four participants (7.1%) responded to this item as “I don’t want to say” in terms of identifying annual income. Eight participants (14.3%) identified their annual income in the \$10,000-14,999 range. Three participants (5.4%) identified their annual income in the \$15,000-19,999 range. Three participants (5.4%) identified their annual income in the \$25,000-49,000 range.. The majority of the sample, twenty-five participants (44.6%) indicated that they did not know what their annual income was. Thirteen participants (23.2%) identified their annual income as less than \$10,000. Figure 13 portrays a graphic representation of this characteristic.

Table 15. Description of Demographic Characteristic Household Income of Pregnant Adolescents Utilizing Frequency

	Household Income	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I Don't Want to	4	7.1	7.1	7.1
	\$10,000 - 14,999	8	14.3	14.3	21.4
	\$15,000 - 19,999	3	5.4	5.4	26.8
	\$25,000 - 49,000	3	5.4	5.4	32.1
	I Don't Know My	25	44.6	44.6	76.8
	Less Than \$10,000	13	23.2	23.2	100.0
Total	---	56	100.0	100.0	---

Figure 13. Histogram of Demographic Characteristic Household Income of Pregnant Adolescents

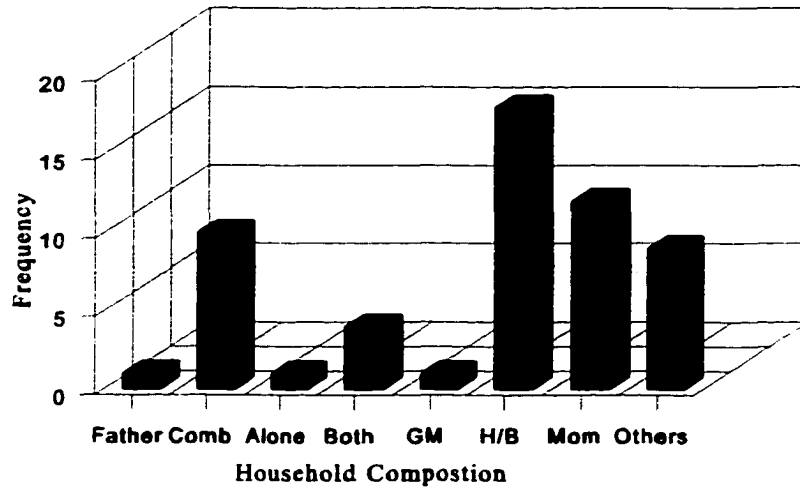


Household Composition. Table 16 gives a description of the demographic characteristic “household composition” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. One participant (1.8%) indicated that she lived with her “father only.” Ten participants (17.9%) indicated they lived with a combination of people listed on this item. One participant (1.8%) indicated that she lives “alone.” Four participants (7.1%) indicated they live with “both parents.” One participant (1.8%) indicated she lives with a “grandmother.” Eighteen participants (32.1%) indicated that they live with a “husband or boyfriend.” Twelve participants (21.4%) indicated they live with their “mother only.” Nine participants (16.1%) indicated they live with other people than those identified on this item. Figure 14 graphically portrays this demographic characteristic.

Table 16. Description of Demographic Characteristic Household Composition of Pregnant Adolescents Utilizing Frequency

	Household Composition	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Father Only	1	1.8	1.8	1.8
	Combination of These	10	17.9	17.9	19.6
	Alone	1	1.8	1.8	21.4
	Both Parents	4	7.1	7.1	28.6
	Grandmother	1	1.8	1.8	30.4
	Husband or Boyfriend	18	32.1	32.1	62.5
	Mother Only	12	21.4	21.4	83.9
	Other People	9	16.1	16.1	100.0
Total	---	56	100.0	100.0	---

Figure 14. Histogram of Demographic Characteristic Household Composition of Pregnant Adolescents

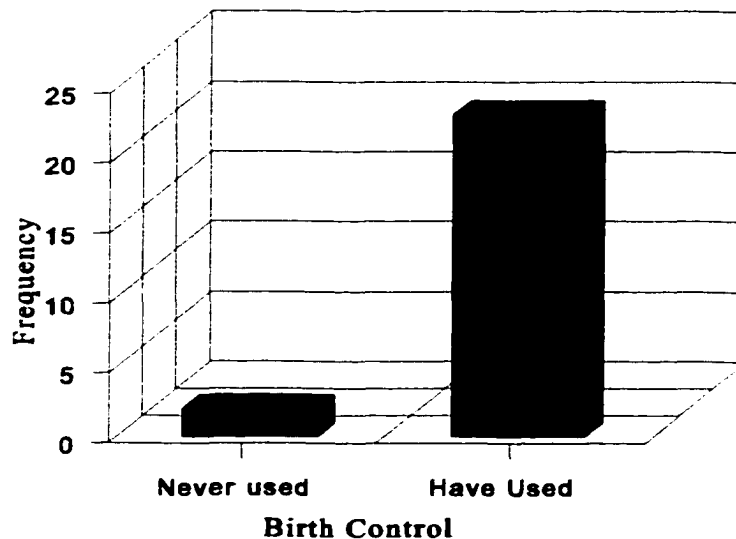


Birth Control. Table 17 gives a description of the demographic characteristic “birth control” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. Two subjects (3.6%) responded “I have never used birth control.” Twenty-three participants (41.1%) indicated that they “don’t use birth control now” of any type. The majority of the sample, thirty-one participants (55.4%) indicated they “have used some type of birth control” in the past. Figure 15 provides a graphic representation of this characteristic.

Table 17. Description of Demographic Characteristic Birth Control of Pregnant Adolescents Utilizing Frequency

	Birth Control	Frequency	Percent	Valid Percent	Cumulative Percent
Vali	I Have Never Used Birth	1	1.8	1.8	1.8
	I Have Used Some Type	55	98.2	98.2	100.0
Tota	---	56	100.0	100.0	---

Figure 15. Histogram of Demographic Characteristic Birth Control of Pregnant Adolescents



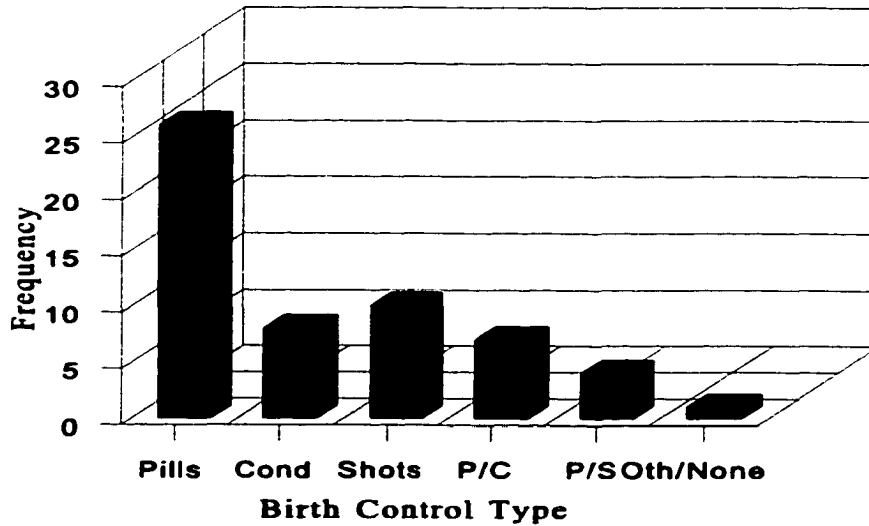
Birth Control Type. Table 18 gives a description of the demographic characteristic “birth control type” of pregnant adolescents utilizing frequency. Fifty-six subjects responded to this item on the demographic questionnaire. Twenty-six participants (46.4%) indicated they had used “birth control pills” as a birth control method. Eight participants (26%) indicated they had used “condoms only.” Ten participants (17.9%) responded they had used “Depo-Provera shots” as a birth control method. Seven participants (12.5%) indicated they had used a combination of methods including “pills/condoms.” Four

participants (7.1%) indicated they had also used a combination of methods including “pills/shots.” One participant (1.8%) indicated they had used “other or none” methods of birth control. Figure 16 provides a graphic representation of this characteristic.

Table 18. Description of Demographic Characteristic Birth Control Type of Pregnant Adolescents Utilizing Frequency

	Birth Control Type	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Birth Control Pills	26	46.4	46.4	46.4
	Condoms Only	8	14.3	14.3	60.7
	Depo-Provera Shots	10	17.9	17.9	78.6
	Pills/Condoms	7	12.5	12.5	91.1
	Pills/Shots	4	7.1	7.1	98.2
	Other/None	1	1.8	1.8	100.0
Total	---	56	100.0	100.0	---

Figure 16. Histogram of Demographic Characteristic Birth Control Type of Pregnant Adolescents

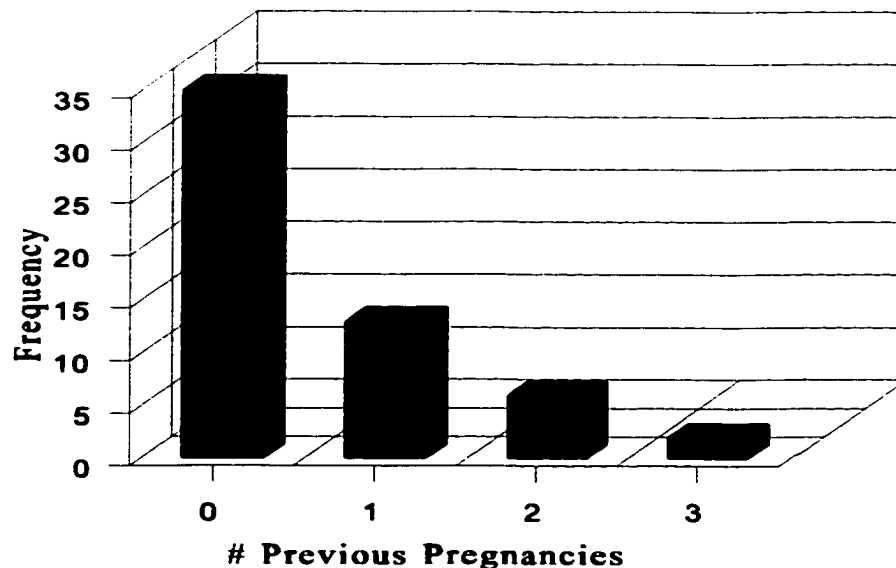


Number of Previous Pregnancies. Table 19 gives a description of the demographic characteristic “number of previous pregnancies.” All fifty-six subjects responded to this item on the demographic questionnaire, which was a fill-in-the-blank item. Forty-three participants (76.8%) indicated they had “0” or no previous pregnancies. Ten participants (18.0%) indicated they had had “one” previous pregnancy. Two participants (3.6%) indicated they have had “two” previous pregnancies. One participant (1.8%) indicated she had had “3” previous pregnancies. Figure 17 provides a graphic representation of this characteristic.

Table 19. Description of Demographic Characteristic Number of Previous Pregnancies of Pregnant Adolescents Utilizing Frequency

	# Previous Pregnancies	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	43	76.8	76.8	76.8
	1	10	18.0	18.0	94.8
	2	2	3.6	3.6	98.4
	3	1	1.8	1.8	100.0
Total	---	56	100.0	100.0	---

Figure 17. Histogram of Demographic Characteristic Number of Previous Pregnancies of Pregnant Adolescents

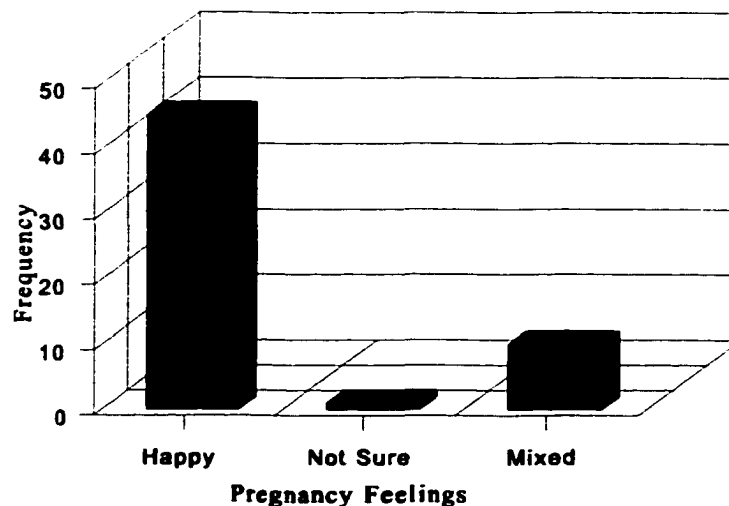


Pregnancy Feelings. Table 20 gives a description of the demographic characteristic “pregnancy feelings” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. The majority of the sample, forty-five participants (80.4%) indicated they were feeling “happy” about the current pregnancy. Ten participants (17.9%) indicated they have “mixed feelings” regarding the current pregnancy. One participant (1.8%) indicated she was “not sure” how she felt about the current pregnancy. No one indicated they were “unhappy” about the current pregnancy. Figure 18 portrays a graphic representation of this characteristic.

Table 20. Description of Demographic Characteristic Pregnancy Feelings of Pregnant Adolescents Utilizing Frequency

	Pregnancy Feelings	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Happy	45	80.4	80.4	80.4
	Not Sure	1	1.8	1.8	82.1
	Have Mixed Feelings	10	17.9	17.9	100.0
Total	---	56	100.0	100.0	---

Figure 18. Histogram of Demographic Characteristic Pregnancy Feelings of Pregnant Adolescents

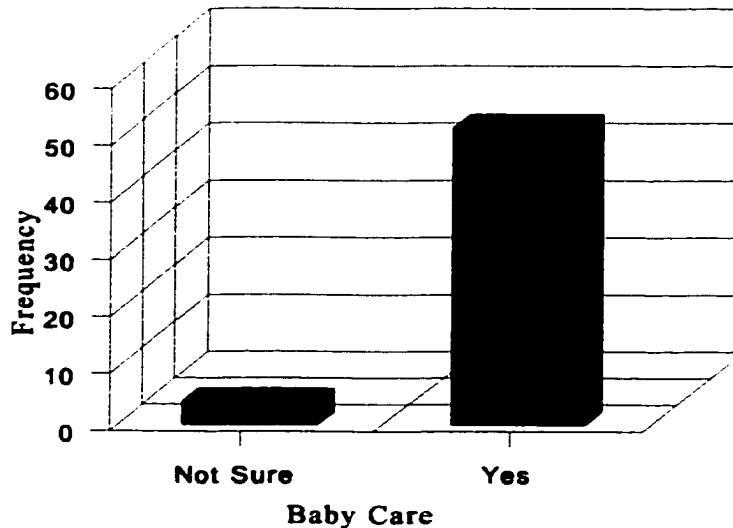


Baby Care. Table 21 describes the demographic characteristic “baby care” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. . Four participants (7.1%) indicated they were “not sure” how they were feeling about taking care of a baby. The majority of the sample, fifty-two participants (92.9%) indicated “yes” they felt well prepared and able to take care of a baby. None of the participants responded “no” they were not prepared to care for a baby. Figure 19 provides a graphic representation of this characteristic.

Table 21. Description of Demographic Characteristic Baby Care of Pregnant Adolescents Utilizing Frequency

	Baby Care	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Sure	4	7.1	7.1	7.1
	Yes	52	92.9	92.9	100.0
Total	---	56	100.0	100.0	---

Figure 19. Histogram of Demographic Characteristic Baby Care of Pregnant Adolescents



Type of Insurance. Table 22 gives a description of the demographic characteristic “type of insurance” of pregnant adolescents utilizing frequency. All fifty-six subjects responded to this item on the demographic questionnaire. Two participants (3.6%) indicated they were on another type of insurance. Four participants (7.1%) indicated they “didn’t know” what type of insurance they were on. The majority of the sample, fifty participants (89.3%) indicated they were enrolled in either Medi-Cal or the state run CPSP (Comprehensive Prenatal Services Program).

Figure 20 portrays a graphic representation of this characteristic.

Table 22. Description of Demographic Characteristic Type of Insurance of Pregnant Adolescents Utilizing Frequency

	Type of Insurance	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Another Type of	2	3.6	3.6	3.6
	I Don't Know	4	7.1	7.1	10.7
	Medi-Cal or CPSP	50	89.3	89.3	100.0
Total	---	56	100.0	100.0	---

Figure 20. Histogram of Demographic Characteristic Type of Insurance of Pregnant Adolescents

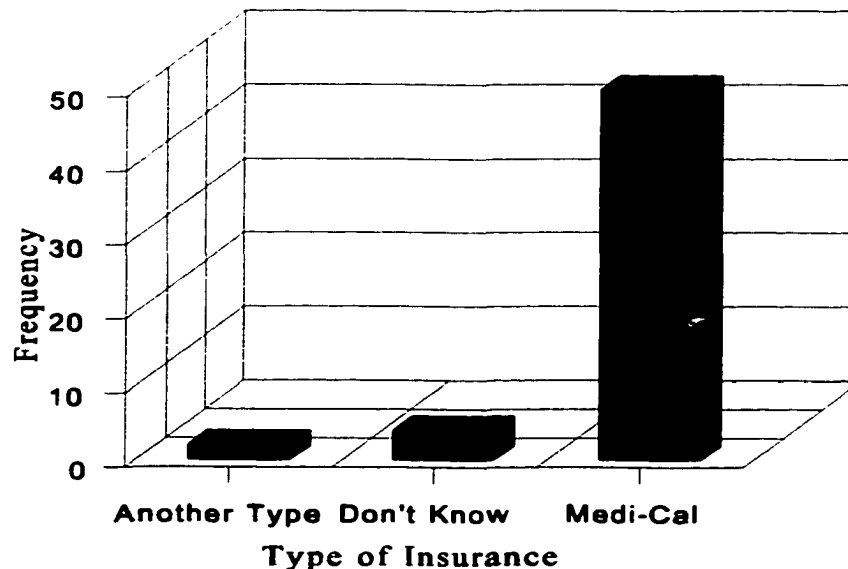


Table 23 provides a summary description of frequencies for all the demographic characteristics previously discussed.

Table 23. Description of Demographic Characteristics of Pregnant Adolescents

VARIABLE	NUMBER	PERCENT
Location		
BHS	24	42.9
Dr. Yoo	13	23.2
FCC	12	21.4
RPMG	7	12.5
Ethnicity		
African-American	6	10.7
Asian	3	5.4
Caucasian/Indian	1	1.8
Caucasian	16	28.6
Hispanic	27	48.2
Hmong	1	1.8
Native American	1	1.8
Other	1	1.8
Age		
14	2	3.6
15	7	12.5
16	12	21.4
17	8	14.3
18	13	23.2
19	14	25.0

Table 23. Description of Demographic Characteristics of Pregnant Adolescents (continued)

VARIABLE	NUMBER	PERCENT
Birthdate (By Year)		
1979	14	25.0
1980	15	27.0
1981	6	11.0
1982	13	23.0
1983	7	13.0
1984	1	1.8
Pregnancy Status		
Pregnant Now	43	76.8
Pregnant/Had Baby	13	23.2
Marital Status		
Married	10	17.9
Single/Engaged	45	80.4
Language		
English	52	92.9
Other	1	1.8
Spanish	3	5.4

Table 23. Description of Demographic Characteristics of Pregnant Adolescents (continued)

VARIABLE	NUMBER	PERCENT
First Language		
English/Spanish	1	1.8
English	41	73.2
Other	3	5.4
Spanish	11	19.6
Religion		
Not Sure	5	8.9
Catholic	14	25.0
No Religion	11	19.6
Other	6	10.7
Protestant	20	35.7
Church Attendance		
Don't Usually Attend	4	7.1
Always Attend	13	23.2
Attend on Holidays	3	5.4
Never attend	14	25.0
Sometimes Attend	22	39.3

**Table 23. Description of Demographic Characteristics of Pregnant Adolescents
(continued)**

VARIABLE	NUMBER	PERCENT
Mom's Marital Status		
Deceased	1	1.8
Deceased/Grandmother	1	1.8
Divorced	16	28.6
Married	1	1.8
Single/Engaged	16	28.6
Widowed	20	35.7
I don't know	1	1.8
Father's Marital Status		
Deceased	8	14.3
Divorced	10	17.9
Married	19	33.9
Single/Engaged	17	30.4
Widowed	2	3.6
Household Income		
I don't want to say	4	7.1
\$10,000-14,999	8	14.3
\$15,000-19,999	3	5.4
\$25,000-49,000	3	5.4
I don't know	25	44.6
Less than \$10,000	13	23.2

**Table 23. Description of Demographic Characteristics of Pregnant Adolescents
(continued)**

VARIABLE	NUMBER	PERCENT
Household Composition		
Father Only	1	1.8
Combination of these people	10	17.9
Alone	1	1.8
Both Parents	4	7.1
Grandmother	1	1.8
Husband/Boyfriend	18	32.1
Mother only	12	21.4
Other people	9	16.1
Birth Control		
Never used birth control	1	1.8
Have used some type	55	98.2
Birth Control Type		
BC Pills	26	46.4
Condoms only	8	14.3
D-P Shots	10	17.9
Pills/Condoms	7	17.9
Pills/Shots	4	7.1
Other/None	1	1.8

Table 23. Description of Demographic Characteristics of Pregnant Adolescents (continued)

VARIABLE	NUMBER	PERCENT
No. Of Previous Pregnancies		
0	43	76.8
1	10	18.0
2	2	3.6
3	1	1.8
Pregnancy Feelings		
Happy	45	80.4
Not Sure	1	1.8
Mixed	10	18.0
Baby Care		
Not sure	4	7.1
Yes	52	92.9
Type of Insurance		
Another Type	2	3.6
I don't know	4	7.1
Medi-Cal/CPSP	50	89.3

Table 24 provides a demographic profile of the typical study participant. The most prevalent characteristic “location” for this study was *Banning High School* with 42.9% of the sample participants. The most represented “ethnicity” was identified as *Hispanic* with 48.2% of the participants. The typical respondent’s “age” was *19* with

25% of the participants falling into this category. The typical characteristic “birth-date” fell in the year **1980** with 27% of the participants being born during this year. The mean characteristic “pregnancy status” was for the participant to be ***pregnant now for the first time***. 76.8% of the sample participants fell into this category. The majority of participants described their “marital status” was ***single/and or engaged*** with 80.4% of the participants identifying themselves within this category. The characteristic “language” used by the majority of the participants is ***English***, with 92.9% identifying it as the primary language they use now. The most prevalent “first language” learned as a child was identified as being ***English*** by 73.2% of the participants. The most prevalent “religion” in terms of religious preference is ***Protestant***, as identified by 35.7% of the participants.

“Church attendance” referring to patterns of church attendance was identified most often as ***I sometimes attend*** by 39.3%. The most identified “mother’s marital status” was seen to be the category of ***widowed*** by 35.7%. The most popular “father’s marital status” was also seen to be the category of ***married*** by 33.9% of the participant population. The typical “household income” was identified as being ***unknown*** by 44.6% of the population. The typical “household composition” was composed of the participant and her ***husband or boyfriend*** (32.1%). The typical response regarding “birth control” was that 55.4% ***have used some type of birth control***. The most common “birth control type” identified was ***birth control pills*** which was the method of choice by 46.4% of the participants. The typical response relating to number of “previous pregnancies” was ***none*** by 76.8% of participants. The majority of the participants, 80.4%, were feeling ***happy*** about this pregnancy. The majority of the

participants, 92.9% felt *well prepared to take care of a baby*. And 89.3% of the participants were *on Medi-Cal/CPSP* as their type of medical insurance coverage.

Table 24. Typical Profile of Pregnant Adolescent Demographic Characteristics

Demographic Characteristic	Mean Sample Response	Sample % Responding
Location	Banning High School	42.9%
Ethnicity	Hispanic	48.2%
Age	19	25%
Birthdate	1980	27%
Pregnancy status	Pregnant now/first time	76.8%
Marital status	single/engaged	80.4%
Language	English	92.9%
First language	English	73.2%
Religion	Protestant	35.7%
Church attendance	Sometimes	39.3%
Mother's marital status	Widowed	35.7%
Father's marital status	Married	33.9%
Household Income	Don't Know Income	44.6%
Household Composition	Husband/boyfriend	32.1%
Birth control	Have used some birth control	55.4%
Birth control type	Birth control pills	46.4%
Previous pregnancies	None	76.8%
Pregnancy feelings	Happy	80.4%
Baby Care	Yes - well prepared	92.9%
Type of Insurance	Medi-Cal/CPSP	89.3%

Comparison of sample PAC scores with PAC instrument scores

Table 25 provides a description of the Parent Adolescent Communication tool raw scores utilizing frequency for the mother-adolescent scale as tabulated for the sample population (N = 56). Fifty-four out of fifty-six subjects completed the mother-adolescent scale and total scores were tabulated for them. Two subjects did not complete the mother-adolescent scale and these scores were considered to be “missing.” These two subjects indicated that they never knew their mother and/or their mother was deceased at an early age. The range in scores for the sample population was 23-72. Figure 21 displays PAC raw scores for the adolescent-mother scale.

Table 25. Description of PAC Raw Scores For Mother-Adolescent Utilizing Frequency

		Frequency	Percent	Valid Percent
Valid	72.00	1	1.8	1.9
	66.00	3	5.4	5.6
	65.00	2	3.6	3.7
	64.00	3	5.4	5.6
	63.00	6	10.7	11.1
	62.00	2	3.6	3.7
	61.00	5	8.9	9.3
	60.00	5	8.9	9.3
	59.00	4	7.1	7.4
	57.00	2	3.6	3.7
	56.00	4	7.1	7.4
	54.00	3	5.4	5.6
	53.00	1	1.8	1.9
	52.00	3	5.4	5.6
	50.00	3	5.4	5.6
	48.00	1	1.8	1.9
	43.00	2	3.6	3.7
	42.00	1	1.8	1.9

	30.00	1	1.8	1.9
	23.00	1	1.8	1.9
	Total	54	96.4	100.0
Missing	0.00	2	3.6	
Total		56	100.0	

Table 26 provides a description of PAC raw scores utilizing descriptive statistics for the adolescent-mother scale. The mean was 56.6, median, 59.5, mode 63.0 (SD =9.14).

Table 26. Description of PAC Raw Scores Utilizing Descriptive Statistics for Mother-Adolescent Scale

	Adolescent-Mother Scores
Number Valid	54
Missing	2
Mean	56.6481
Median	59.5000
Mode	63.00
Standard Deviation	9.1490
Variance	83.7041

Figure 21. Histogram of Adolescent-Mother Scores Utilizing Frequency

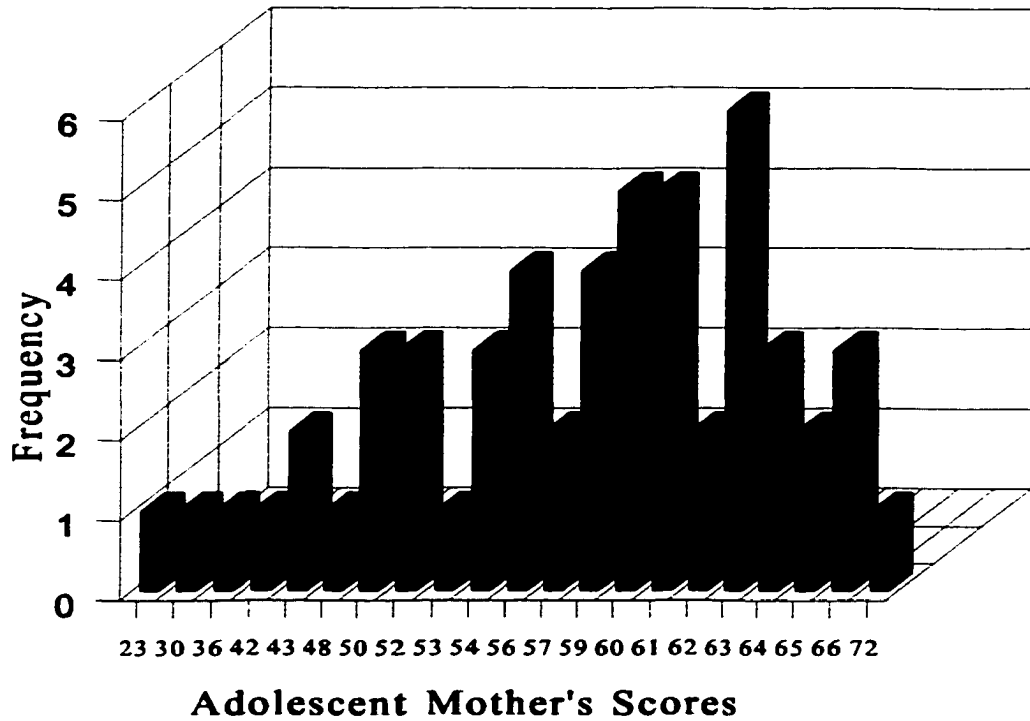


Table 27 provides a description of the PAC raw scores utilizing frequency for the adolescent-father scale as tabulated for the sample population (N =56). Forty-eight out of fifty-six subjects completed the PAC adolescent-father scale and total scores were tabulated for them. Eight subjects did not complete the adolescent-father scale and were considered “missing.” These subjects indicated that they never knew a father in their lives and/or he was gone either living in another part of the country or prison, or deceased, and they were unable to respond to the scale due to lack of communication with their father. The range of scores for the adolescent-father scale was 20-62. Figure 22 provides a graphic representation of the adolescent PAC scores for the adolescent-father scale. Table 28 gives a description of PAC raw scores utilizing descriptive statistics for the adolescent-father scale. The mean score was 46.1, median 49.5, mode

52.0 (SD =12.38). Table 29 provides a descriptive comparison of PAC raw scores for adolescent-mother scales and adolescent-father scales. The adolescent mean score related to their mothers was 56.6. The adolescent mean score related to their fathers was 46.1.

Table 27. Description of Father's PAC Raw Scores Utilizing Frequency for Father-Adolescent Scale

		Frequency	Percent	Valid Percent
Valid	62.00	1	1.8	2.1
	60.00	5	8.9	10.4
	59.00	1	1.8	2.1
	58.00	3	5.4	6.3
	57.00	3	5.4	6.3
	56.00	1	1.8	2.1
	54.00	1	1.8	2.1
	53.00	2	3.6	4.2
	52.00	5	8.9	10.4
	51.00	1	1.8	2.1
	50.00	1	1.8	2.1
	49.00	3	5.4	6.3
	48.00	1	1.8	2.1
	47.00	1	1.8	2.1
	45.00	1	1.8	2.1
	44.00	1	1.8	2.1
	43.00	1	1.8	2.1
	41.00	1	1.8	2.1
	40.00	2	3.6	4.2
	39.00	1	1.8	2.1
	37.00	3	5.4	6.3
	33.00	1	1.8	2.1
	31.00	1	1.8	2.1
	27.00	1	1.8	2.1
	25.00	2	3.6	4.2
	23.00	1	1.8	2.1
	22.00	1	1.8	2.1

	20.00	2	3.6	4.2
	Total	48	85.7	100.0
Missi	0.00	8	14.3	
	Total	8	14.3	
Total		56	100.0	

Table 28. Description of PAC Raw Scores Utilizing Descriptive Statistics for Father-Adolescent-Father Scale

	Adolescent-Father Scores
Number Valid	48
Missing	8
Mean	46.1250
Median	49.5000
Mode	52.00
Standard Deviation	12.3867
Variance	153.430

Figure 22. Histogram of Adolescent-Father Scores Utilizing Frequency

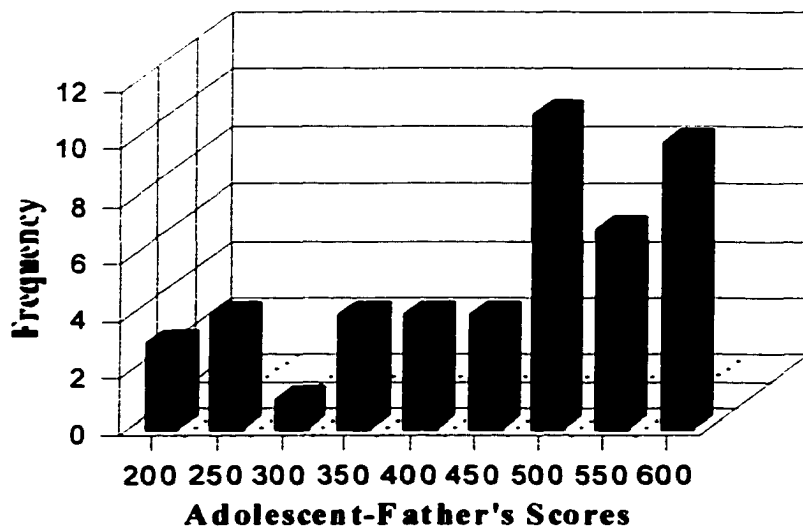


Table 29. Descriptive Comparison of Raw PAC Scores Utilizing Descriptive Statistics

	Adolescents re: Mothers	Adolescents re: Fathers
Number Valid	54	48
Missing	2	8
Mean	56.6481	46.1250
Standard Deviation	9.1490	12.3867
Skewness	-1.665	-0.761
Standard Error of Skewness	0.325	0.343
Kurtosis	3.480	-0.531
Standard Error of Kurtosis	0.639	0.674
Range	49.00	42.00

Table 30 provides a comparison of sample PAC raw scores converted to percentile scores, which was calculated in order to compare appropriately with the normed PAC instrument, for all adolescent-mother scales and all adolescent-father scales tabulated. The high score for the adolescent-mother scale was 72.0 which is equivalent to a percentile score of 99. The low score for the adolescent-mother scale was 23.0 which is equivalent to a percentile score of 1. The mean score for the adolescent-mother scale was 56.6 or a percentile ranking of 39 for all study scores.

The high score for the adolescent-father scale was 62.0 which is equivalent to a percentile score of 99. The low score for the adolescent-father scale was 20.0 which is equivalent to a percentile score of 1. The mean score for the adolescent-father scale was 46.1 which is between the 39-40th percentile for all study scores.

Table 30. Comparison of PAC Raw Scores Converted to Percentile Scores for Mother-Adolescent and Father-Adolescent Scales

		Adol re: Mothers	Adol re: Fathers
Number		54	48
Missing		2	8
Percentiles	99	72.0000	62.0000
	98	71.400	62.0000
	97	68.1000	61.0600
	96	66.0000	60.0800
	95	66.0000	60.0000
	94	66.0000	60.0000
	93	66.0000	60.0000
	92	65.6000	60.0000
	91	65.0500	60.0000
	90	65.0000	60.0000
	89	64.9500	60.0000
	88	64.4000	60.0000
	87	64.0000	59.6300
	86	64.0000	59.1400
	85	64.0000	58.6500
	84	64.0000	58.1600
	83	63.6500	58.0000
	82	63.0000	58.0000
	81	63.0000	58.0000
	80	63.0000	58.0000
	79	63.0000	57.7100
	78	63.0000	57.2200
	77	63.0000	57.0000
	76	63.0000	57.0000
	75	63.0000	57.0000
	74	63.0000	57.0000
	73	63.0000	57.0000
	72	62.6000	56.2800
	71	62.0500	55.5800
	70	62.0000	54.6000

		Adol re: Mothers	Adol re: Fathers
	69	61.9500	53.8100
	68	61.4000	58.0000
	67	61.0000	57.7100
	66	61.0000	53.0000
	65	61.0000	52.8500
	64	61.0000	52.3600
	63	61.0000	52.0000
	62	61.0000	52.0000
	61	61.0000	52.0000
	60	61.0000	52.0000
	59	60.4500	52.0000
	58	60.0000	52.0000
	57	60.0000	52.0000
	56	60.0000	52.0000
	55	60.0000	51.9500
	54	60.0000	51.4600
	53	60.0000	50.9700
	52	60.0000	50.4800
	51	60.0000	49.9900
	50	59.5000	49.5000
	49	59.0000	49.0100
	48	59.0000	49.0000
	47	59.0000	49.0000
	46	59.0000	49.0000
	45	59.0000	49.0000
	44	59.0000	48.5600
	43	58.3000	48.0700
	42	57.2000	47.5800
	41	57.0000	47.0900
	40	57.0000	46.2000
	39	56.4500	45.2200
	38	56.0000	44.6200
	37	56.0000	44.1300
	36	56.0000	43.6400

		Adol re: Mothers	Adol re: Fathers
	34	56.0000	42.3200
	33	56.0000	41.3400
	32	55.2000	40.6800
	31	54.1000	40.1900
	30	54.0000	40.0000
	29	54.0000	40.0000
	28	54.0000	39.7200
	27	53.8500	39.2300
	26	53.3000	38.4800
	25	52.7500	37.5000
	24	52.2000	37.0000
	23	52.0000	37.0000
	22	52.0000	37.0000
	21	52.0000	37.0000
	20	52.0000	36.2000
	19	50.9000	34.2400
	18	50.0000	32.6400
	17	50.0000	31.6600
	16	50.0000	30.3600
	15	50.0000	28.4000
	14	50.0000	26.7200
	13	48.3000	25.7400
	12	46.0000	25.0000
	11	43.2500	25.0000
	10	43.0000	24.8000
	9	42.9500	23.8200
	8	42.4000	22.9200
	7	41.1000	22.4300
	6	37.8000	21.8800
	5	34.5000	20.9000
	4	31.2000	20.0000
	3	27.5500	20.0000
	2	23.7000	20.0000

Table 31 is the comparison scoring chart from the Parent-Adolescent Communication Scale as developed by H. Barnes & D. Olson (1982) and reported in percentiles by raw score. This chart is taken directly from the PAC instrument and was used as the normed scale with which to compare sample scores. Descriptive statistics are identified on this chart and include the following comparison scores. For the adolescent-mother scale the mean percentile score is 66.56, SD = 12.10, range 65, skew -0.076, kurtosis -0.002, n = 417. For the adolescent-father scale the mean percentile score is 63.74, SD = 12.02, range 67, skew -0.047, kurtosis 0.137, n = 417.

Table 31. Comparison Scoring Chart From Parent-Adolescent Communication Scale as Developed by H. Barnes/D. Olson Reported in Percentiles by Raw Score

Raw Score	Fathers	Mothers	Adolescents re: Their Mothers	Adolescents re: Their Fathers
96	99	99	---	---
94	98	97	---	---
93	96	96	99	99
92	96	95	98	99
90	95	92	98	99
88	92	87	96	98
86	90	82	94	96
84	86	77	93	95
82	82	72	91	93
80	78	65	87	92
78	73	58	83	89
76	65	53	79	85
74	56	45	75	82
72	48	40	70	78

70	40	34	65	73
68	33	27	57	67
66	27	22	53	61
64	22	16	43	53
62	18	12	37	46
60	14	9	28	38
58	11	7	23	30
56	8	---	19	25
54	5	---	16	19
52	---	---	12	17
50	---	---	9	14
48	---	---	7	10
Mean	72.55	75.47	66.56	63.74
Standard Deviation	10.74	11.12	12.10	12.02
Range	60	55	65	67
Skew	-0.146	-0.259	-0.076	-0.047
Kurtosis	-0.104	-0.361	-0.002	0.137
n	496	502	417	417

Table 32 compares sample mean scores including raw scores with their corresponding percentile scores between the study population and the PAC instrument. As indicated on Table 32, the comparison of study PAC scores related to the PAC normed instrument scores is very low for both adolescent perceptions of communication with their mothers and adolescent perceptions of communication with their fathers. The study mean raw score for adolescents related to their mothers was 56.6 with the percentile score for adolescents related to their mothers being 60. The PAC normed instrument mean raw score was approximately 71 with a percentile score was 66.56. The study mean raw score for adolescents related to their fathers was 46.1 with a percentile score of 49. The PAC normed instrument mean raw score for adolescents related to their fathers was 67 with a percentile score of 63.74.

The study percentile scores of adolescents related to their mothers fell close to the middle of the normed population percentile scores. The study percentile scores of adolescents related to their fathers fell at the middle of the bottom third of the normed population percentile scores.

Table 32. Comparison of Mean Sample Raw Scores/Percentile Scores with Mean PAC Instrument Raw Scores/Percentile Scores

Population

Sample Mean Scores			
Adolescents re: Mother's (Raw Scores)	Adolescents re: Mothers (Percentile Scores)	Adolescents re: Fathers (Raw Scores)	Adolescents re: Fathers (Percentile Scores)
56.6	60	46.1	49
PAC Mean Scores			
Adolescents re: Mother's (Raw Scores)	Adolescents re: Mothers (Percentile Scores)	Adolescents re: Fathers (Raw Scores)	Adolescents re: Fathers (Percentile Scores)
71	66.56	67	63.74

Comparison of Demographic Variables with PAC Scores

Table 33 provides a comparison of the mean PAC raw score for adolescents and their mothers and fathers, based on location. At the Banning High School campus the mean score for adolescents related to their mothers was 58 (N=22). The mean score for adolescents related to their fathers was 45.9 (N=20). At Dr. Yoo's clinic the mean score for adolescents related to their mothers was 57.6 (N=13). The mean score for adolescents related to their fathers was 46 (N=9). At the Family Care Center the mean score for adolescents related to their mothers was 53.7 (N=12). The mean score for adolescents related to their fathers was 48.4 (N=12). At Rancho Paseo Medical Group clinic the mean score for adolescents related to their mothers was 55.5 (N=7). The mean score for adolescents related to their fathers was 43.0 (N=7).

The highest mean score for adolescents in terms of location and related to their mothers was 58.0 at the Banning High School campus. The lowest mean score for adolescents in terms of location and related to their mothers was 53.7 at the Family Care Center. The score closest to the study mean (56.6) for adolescents related to their mothers was at Rancho Paseo Medical Group clinic (55.5).

The highest mean score for adolescents and location and related to their fathers was 48.4 at the Family Care Center. The lowest mean score for adolescents and location related to their fathers was 43.0 at Rancho Paseo Medical Group clinic. The score closest to the study mean (46.12) for adolescents related to their fathers was at Dr. Yoo's clinic (46.0).

Table 33. Descriptive Comparison of Demographic Characteristic Location and PAC Raw Score Means

Location		Mother's Scores	Father's Scores
Banning Campus High School	Mean	58.00	45.9000
	N	22	20
	Std. Deviation	9.4567	13.5526
Dr. Yoo's Clinic	Mean	57.6154	46.0000
	N	13	9
	Std. Deviation	5.6501	14.7986
Family Care Center	Mean	53.7500	48.4167
	N	12	12
	Std. Deviation	13.0602	10.4399
Rancho Paseo Medical Group Clinic	Mean	55.5714	43.0000
	N	7	7
	Std. Deviation	4.7909	10.3118
Total	Mean	56.6481	46.1250
	N	54	48
	Std. Deviation	9.1490	12.3867

Ethnicity. Table 34 provides a descriptive comparison of the PAC raw mean scores by ethnicity. For the African-American population the mean score of adolescents related to their mothers was 60.1(N=6). For this same population the mean score of adolescents related to their fathers was 41.6 (N=3). For the Asian population the mean score of adolescents related to their mothers was 49.6 (N=3). For this same population the mean score of adolescents related to their fathers was 42.6 (N=3). For the Caucasian/Indian population the mean score of adolescents related to their mothers was 54.0 (N=1). For this same population the mean score of adolescents related to their fathers was 48.0 (N=1). For the Caucasian population the mean score of adolescents related to their mothers was 54.06 (N=15). For this same population the mean score of adolescents related to their fathers was 41.2 (N=14). For the Hispanic population the mean score of adolescents related to their mothers was 59.4 (N=26). For this same population the mean score of adolescents related to their fathers was 49.5 (N=24). For the Hmong population there was only one respondent; her scores were: PAC score related to her mother was 62.0 (N=1) and the PAC score related to her father was 52.0 (N=1). For the Native American respondent the PAC score related to her mother was 23.0. The PAC score related to her father was 56.0 (N=1). For the “other” category population the PAC score related to her mother was 54.0 (N=1). For the “other” population the PAC score of adolescents related to her father was 37.0 (N=1).

The highest score in terms of ethnicity and adolescents related to their mothers was 62.0 in the Hmong population (N=1). The second highest mean score was 60.1 and found in the African-American population (N=6). The lowest mean score was 23.0 and found in the Native American population (N=1). The mean score closest to the study

mean (56.6) was 54.0, which was the mean for the Caucasian/Indian, Caucasian, and “other” categories of populations.

The highest PAC score in terms of ethnicity and adolescents related to their fathers was 56.0 found in the Native American population (N=1). The second highest PAC score was 52.0 found in the Hmong population (N=1). The lowest PAC score was 37.0 and found in the “other” category. The mean score closet to the study mean (46.1) was 42.6 and found in the Asian population (N=3).

Table 34. Descriptive Comparison of Demographic Characteristic Ethnicity and PAC Raw Score Means

Ethnicity		Mother's Scores	Father's Scores
African-American	Mean N Std. Deviation	60.1667 6 6.4317	41.6667 3 17.0098
Asian	Mean N Std. Deviation	49.6667 3 11.5470	42.6667 3 11.5036
Caucasian/Indian	Mean N Std. Deviation	54.0000 1	48.0000 1
Caucasian	Mean N Std. Deviation	54.0667 15 9.9317	41.2857 14 14.2852
Hispanic	Mean N Std. Deviation	59.4231 26 5.9543	49.5833 24 11.0056
Hmong	Mean N Std. Deviation	62.0000 1	52.0000 1
Native American	Mean N Std. Deviation	23.0000 1	56.0000 1
Other	Mean N Std. Deviation	54.0000 1	37.0000 1
Total	Mean N Std. Deviation	56.6481 54 9.1490	46.1250 48 12.3867

Age. Table 35 gives a descriptive comparison of the demographic characteristic “age” and PAC raw score means. For adolescents whose age was 14, the mean PAC score related to their mothers was 63.0 (N=2). For these same adolescents, the mean PAC score for adolescents related to their fathers was 30.0 (N=2). For adolescents whose age was 15, the mean PAC score related to their mothers was 54.5 (N=7). For these same adolescents, the mean PAC score related to their fathers was 54.7 (N=4). For adolescents whose age was 16, the mean PAC score related to their mothers was 56.5 (N=12). For these same adolescents, the mean PAC score related to their fathers was 46.9 (N=10). For adolescents whose age was 17, the mean PAC score related to their mothers was 59.8 (N=7). For these same adolescents, the mean PAC score related to their fathers was 47.8 (N=8). For adolescents whose age was 18, the mean PAC score related to their mothers was 57.0 (N=12). For these same adolescents, the mean PAC score related to their fathers was 46.6 (N=12). For adolescents whose age was 19, the mean PAC score related to their mothers was 55.0. For these same adolescents, the mean PAC score related to their fathers was 45.5 (N=12).

The highest mean score for adolescents related to their mothers was among 14-year-olds. The lowest mean score for adolescents related to their mothers was among 15-year-olds. The PAC mean score closest to the study mean (56.6) for adolescents related to their mothers was among 16-year-olds.

The highest mean score for adolescents related to their fathers was among 15-year-olds. The lowest mean score for adolescents related to their fathers was among 14-year-olds. The PAC mean score closest to the study mean (46.1) for adolescents related to their fathers was among 19-year-olds.

Table 35. Descriptive Comparison of Demographic Characteristic Age and PAC Raw Score Means

Age		Mother's Scores	Father's Scores
14	Mean	63.0000	30.0000
	N	2	2
	Std. Deviation	0.0000	14.1421
15	Mean	54.5714	54.7500
	N	7	4
	Std. Deviation	16.0920	8.0571
16	Mean	56.5000	46.9000
	N	12	10
	Std. Deviation	10.2381	12.8448
17	Mean	59.8571	47.8750
	N	7	8
	Std. Deviation	3.4365	10.7230
18	Mean	57.0000	46.6667
	N	12	12
	Std. Deviation	6.8224	13.8323
19	Mean	55.0000	45.5833
	N	14	12
	Std. Deviation	8.4307	11.6499
Total	Mean	56.6481	46.1250
	N	54	48
	Std. Deviation	9.1490	12.3867

Birth-date. Table 36 provides a descriptive comparison of the demographic characteristic “birth-date” and the PAC raw score means. For adolescents whose “birth-date” fell in the year 1979, the mean PAC score related to their mothers was 55.0 (N=14). For these same adolescents, the mean PAC score related to their fathers was 43.5 (N=12). For adolescents whose “birth-date” fell in the year 1980, the mean PAC score related to their

mothers was 57.3 (N=14). For these same adolescents, the mean PAC score related to their fathers was 55.6 (N=14). For adolescents whose “birth-date” fell in the year 1981, the mean PAC score related to their mothers was 60.0 (N=5). For these same adolescents, the mean PAC score related to their fathers was 45.8 (N=6). For adolescents whose “birth-date” fell in the year 1982, the mean PAC score related to their mothers was 55.8 (N=13). For these same adolescents, the mean PAC score related to their fathers was 47.3 (N=10). For adolescents whose “birth-date” fell in the year 1983, the PAC score related to their mothers was 57.5 (N=8). For these same adolescents, the mean PAC score related to their fathers was 47.5 (N=6).

The highest mean PAC score of adolescents related to their mothers was found among those having “birth-dates” during 1981. The lowest mean PAC score of adolescents related to their mothers was found among those having “birth-dates” during 1971. The mean PAC score closest to the study mean (56.6) was among adolescents with “birth-dates” occurring during 1982.

The highest mean PAC score of adolescents related to their fathers was found among those having “birth-dates” during 1980. The lowest mean PAC score of adolescents related to their fathers was found among those having “birth-dates” during 1979. The mean PAC score closest to the study mean (46.1) was among adolescents with “birth-dates” occurring in 1981.

Table 36. Descriptive Comparison of Demographic Characteristic “Birth-date” By Year and PAC Raw Score Means

Birthdate by Year		Mother's Scores	Father's Scores
1979	Mean	55.0	43.5
	N	14	12
1980	Mean	57.3	55.6
	N	14	14
1981	Mean	60.0	45.8
	N	5	6
1982	Mean	55.8	47.3
	N	13	10
1983	Mean	57.5	47.5
	N	8	6

Pregnancy status. Table 37 provides a descriptive comparison of the demographic characteristic “pregnancy status” and PAC raw score means. For adolescents who responded “I am pregnant now”, (for the first time) the mean PAC score related to their mothers was 57.04 (N=43). For these same adolescents, the mean PAC score related to their fathers was 46.7 (N=37). For adolescents who responded “I am pregnant now and I already had a baby,” the mean PAC score related to their mothers was 54.3 (N=13). For these same adolescents, the mean PAC score related to their fathers was 46.1 (N=11).

The highest mean PAC score of adolescents related to their mothers was among the group indicating “I am pregnant now,” (for the first time). The lowest mean score of adolescents related to their mothers was found among the group indicating a pregnancy status of “I am pregnant now and had a baby.” The PAC score of adolescents related to

their mothers closest to the study mean (56.6) was among those indicating “I am pregnant now (for the first time).” The highest mean PAC score of adolescents related to their fathers was among the group indicating “I am pregnant now,” (for the first time). The lowest mean score of adolescents related to their fathers was found among the group indicating a pregnancy status of “I am pregnant now and had a baby.” The PAC score of adolescents related to their fathers closest to the study mean (46.1) was among those indicating “I am pregnant now/and already had a baby.”

Table 37. Descriptive Comparison of Demographic Characteristic Pregnancy Status and PAC Raw Score Means

Pregnancy Status		Mother's Scores	Father's Scores
I am pregnant now	Mean	57.0476	46.7838
	N	43	37
	Std. Deviation	9.3599	13.3107
I am pregnant now and had a baby	Mean	54.3000	46.1000
	N	13	10
	Std. Deviation	9.1779	5.1088
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Marital Status. Table 38 provides a descriptive comparison of the demographic characteristic “marital status” and the PAC raw score means. For adolescents who indicated their marital status as “married” the mean score related to their mothers was 55.5 (N=9). For these same adolescents, the mean score related to their fathers was 49.6 (N=9). For adolescents who indicated their marital status as “single and/or engaged” the mean score related to their mothers was 57.0 (N=44). For these same adolescents, the mean score related to their fathers was 45.3 (N=39).

The highest mean score for adolescents related to their mothers was found among those indicating their marital status as “single/engaged.” The lowest mean score for adolescents related to their mothers was found among those who indicated their marital status as “married.” The PAC score for adolescents related to their mothers which was closest to the study mean (56.8) was among those indicating their marital status to be “single/engaged.”

The highest mean score for adolescents related to their fathers was found among those indicating their marital status as “married.” The lowest mean score for adolescents related to their fathers was found among those indicating their marital status as “single/engaged.” The PAC score for adolescents related to their fathers which was closest to the study mean (46.1) was also among those indicating their marital status to be “single and/or engaged.”

Table 38. Descriptive Comparison of Demographic Characteristic Marital Status and PAC Raw Score Means

Marital Status		Mother's Scores	Father's Scores
Married	Mean	55.5556	49.6667
	N	9	9
	Std. Deviation	6.0438	6.3640
Single/Engaged	Mean	57.0682	45.3077
	N	44	39
	Std. Deviation	9.7059	13.3262
Total	Mean	56.8113	46.1250
	N	53	48
	Std. Deviation	9.1569	12.3867

Language. Table 39 provides a descriptive comparison of the demographic characteristic “language” and the PAC raw score means. For adolescents who indicated their primary language as “English” the mean score related to their mothers was 56.6 (N=50). For these same adolescents related to the fathers the mean score was 46.3 (N=46). For adolescents who indicated their primary language to be “Spanish” the mean score related to their mothers was 61.6 (N=3). For these same adolescents related to their fathers the mean score was 53.0 (N=1). For the adolescent identifying her primary language as “other” the PAC score related to her mother was 43.0 (N=1). For this same adolescent related to her father the PAC score was 31.0 (N=1).

The highest mean score for adolescents related to their mothers was found among those indicating the primary language as “Spanish.” The lowest mean score for adolescents related to their mothers was found among those indicating the primary language as “other.” The score closest to the study mean (56.6) for adolescents related to

their mothers was among those indicating that their primary language spoken is “English.”

The highest mean score for adolescents related to their fathers was found among those indicating the primary language as “Spanish.” The lowest mean score for adolescents related to their fathers was found among those indicating their primary language as “other.” The score closest to the study mean (46.1) for adolescents related to their fathers was among those indicating their primary language as “Spanish.”

Table 39. Descriptive Comparison of Demographic Characteristic Language and PAC Raw Score Means

Language		Mother's Scores	Father's Scores
English	Mean	56.6200	46.3043
	N	50	46
	Std. Deviation	9.1849	12.4130
Other	Mean	43.0000	31.0000
	N	1	1
	Std. Deviation		
Spanish	Mean	61.6667	53.0000
	N	3	1
	Std. Deviation	4.5092	
Total	Mean	56.6481	46.1250
	N	54	48
	Std. Deviation	9.1490	12.3867

First Language. Table 40 provides a descriptive comparison of the demographic characteristic “first language” learned as a child. For adolescents who indicated that “English” was the first language learned, the mean score related to their mothers was 55.9 (N=41). For these same adolescents related to their fathers the mean score was 44.7 (N=46). For adolescents who indicated that “Spanish” was the first language learned, the mean score related to their mothers was 59.2 (N=11). For these same adolescents, the mean score related to their fathers was 51.4 (N=10). For adolescents who indicated “other” as the first language learned, the mean score related to their mothers was 56.0 (N=4). For these same adolescents related to their fathers the mean score was 45.6 (N=4).

The highest mean score for adolescents related to their mothers was found among those indicating first language as “Spanish.” The lowest mean score for adolescents related to their mothers was found among those indicating first language as “English.” The mean score for adolescents related to their mothers most closely related to the mean study score (56.6) was found among those who indicated “other” as the first language learned as a child.

The highest mean score for adolescents related to their fathers was found among those indicating first language as “Spanish.” The lowest mean score for adolescents related to their fathers was found among those indicating first language as “English.” The mean score for adolescents related to their fathers most closely related to the mean study score (46.1) was found among those who indicated “other” as the first language learned as a child.

Table 40. Descriptive Comparison of Demographic Characteristic First Language and PAC Raw Score Means

First Language		Mother's Scores	Father's Scores
English	Mean	55.9000	44.7941
	N	41	46
	Std. Deviation	9.5187	12.4130
Other	Mean	56.0000	45.6667
	N	4	4
	Std. Deviation	11.2694	12.7410
Spanish	Mean	59.2000	51.4000
	N	11	10
	Std. Deviation	7.5982	11.1076
Total	Mean	56.6481	46.1250
	N	54	48
	Std. Deviation	9.1490	12.3867

Religion. Table 41 provides a descriptive comparison of the demographic characteristic “religion” and the PAC raw score means. For adolescents who felt “not sure” about their religious preference, the mean score related to their mothers was 60.6 (N=5). For these same adolescents, the mean score related to their fathers was 52.4 (N=5). For adolescents who indicated their religious preference as “Catholic” the mean score related to their mothers was 59.6 (N=14). For these same adolescents the mean score related to their fathers was 47.6 (N=14). For adolescents who indicated “no religion” as their preference, the mean score related to their mothers was 52.7 (N=11). For these same adolescents related to their fathers the mean score was 44.5 (N=7). For adolescents indicating their religious preference as “other” the mean score related to their mothers was 55.8 (N=6). For these same adolescents related to their fathers the mean score was 46.7 (N=8). For adolescents indicating their religious preference as “Protestant” the mean score related to

their mothers was 56.0 (N=20). For these same adolescents related to their fathers the mean score was 43.8 (N=19).

The highest mean score for adolescents related to their mothers was found among those indicating religious preference as “not sure.” The lowest mean score for adolescents related to their mothers was found among those indicating religious preference as “no religion.” The mean score most closely related to the study mean score (56.6) for adolescents related to their mothers was found among the group indicating their religious preference as “Protestant.”

The highest mean score for adolescents related to their fathers was found among those indicating religious preference as “not sure.” The lowest mean score for adolescents related to their fathers was found among those indicating religious preference as “Protestant.” The mean score most closely related to the study mean score (46.1) for adolescents related to their fathers was found among the group indicating their religious preference as “other.”

Table 41. Descriptive Comparison of Demographic Characteristic Religion and PAC Raw Score Means

Religion		Mother's Scores	Father's Scores
Not Sure	Mean	60.6000	52.4000
	N	5	5
	Std. Deviation	3.2094	8.3247
Catholic	Mean	59.6923	47.6154
	N	14	14
	Std. Deviation	4.9225	14.1512
No Religion	Mean	52.7273	44.5714
	N	11	7
	Std. Deviation	12.7679	12.2591
Other	Mean	55.8000	46.7500

	N	6	8
	Std. Deviation	9.6799	10.5000
Protestant	Mean	56.0500	43.8947
	N	20	19
	Std. Deviation	9.5172	12.8231
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Church Attendance. Table 42 provides a descriptive comparison of the demographic characteristic “church attendance” and the PAC raw score means. For adolescents indicating “I don’t usually attend” related to their mothers the mean score was 61.5 (N=4). For these same adolescents related to their fathers the mean score was 50.2 (N=4). For adolescents indicating “I always attend” related to their mothers the mean score was 59.9 (N=12). For these same adolescents related to their fathers the mean score was 44.5 (N=12). For adolescents indicating “I attend on holidays” related to their mothers the mean score was 49.6 (N=3). For these same adolescents related to their fathers the mean score was 37.0 (N=3). For adolescents indicating “I never attend” related to their mothers the mean score was 52.4 (N=13). For these same adolescents related to their fathers the mean score was 42.1 (N=11). For adolescents indicating “I sometimes attend” related to their mothers the mean score was 57.4 (N=22). For these same adolescents related to their fathers the mean score was 50.2 (N=18).

The highest mean score for adolescents related to their mothers was found among those indicating church attendance as “I don’t usually attend.” The lowest mean score for adolescents related to their mothers was found among those indicating church attendance as “I attend on holidays.” For adolescents related to their fathers the mean

score closest to the study mean (56.6) was found among those indicating church attendance patterns to be “I sometimes attend.”

The highest mean score for adolescents related to their fathers was found among those indicating church attendance as “I don’t usually attend.” The lowest mean score for adolescents related to their fathers was found among those indicating church attendance as “I attend on holidays.” For adolescents related to their fathers the mean score closest to the study mean (46.1) was found among those indicating church attendance patterns to be “I always attend.”

Table 42. Descriptive Comparison of Demographic Characteristic Church Attendance and PAC Raw Score Means

Church Attendance		Mother's Scores	Father's Scores
I don't usually attend	Mean	61.5000	50.2500
	N	4	4
	Std. Deviation	3.6968	806554
I always attend	Mean	59.9167	44.5000
	N	12	12
	Std. Deviation	3.6794	14.3305
I attend on holidays	Mean	49.6667	37.0000
	N	3	3
	Std. Deviation	13.5031	12.0000
I never attend	Mean	52.4615	42.1818
	N	13	11
	Std. Deviation	13.0551	14.6685
I sometimes attend	Mean	57.4091	50.2222
	N	22	18
	Std. Deviation	7.6448	9.2835
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Mother's Marital Status. Table 43 provides a descriptive comparison of the demographic characteristic "mother's marital status" with the PAC raw score means. For the adolescent who indicated "deceased" related to her mother there was no PAC score (N=1). The adolescent-mother PAC scale was not completed. For the adolescent indicating "deceased" for mother's marital status, the PAC score related to her father was 52.0 (N=1). For the adolescents indicating "deceased/grandmother" related to her mother, the PAC score was 61.0 (N=1). For this same adolescent related to her father the PAC score was 37.0 (N=1). For adolescents indicating mother's marital status as "divorced" the mean score related to their mothers was 56.1 (N=16). For these same adolescents related to their fathers the mean score was 42.7 (N=14). For the adolescent indicating "married" the mean scores related to their mothers was 50.0 (N=16). For the same adolescents related to their fathers the mean score was 62.0 (N=16). For adolescents indicating "single and/or engaged" related to their mothers the mean score was 60.7 (N=16). For these same adolescents related to their fathers the mean score was 48.8 (N=15). For adolescents indicating mother's marital status as "widowed" related to their mothers the mean score was 54.1 (N=20). For these same adolescents related to their fathers the mean score was 45.0 (N=1). For adolescents responding "I don't know" when asked about mother's marital status the mean score related to their mothers was 52.0 (N=1). For these same adolescents, the mean score was 60.0 (N=1).

The highest mean score for adolescents related to their mothers was found among those indicating mother's marital status as "deceased/grandmother."

The lowest mean score for adolescents related to their mothers was found among those indicating mother's marital status as "married." For adolescents related to their mothers

the mean score found to be closest to the study mean (56.6) was among those indicating their mother's marital status as "divorced."

The highest mean score for adolescents related to their fathers was found among those indicating mother's marital status as "married." The lowest mean score for adolescents related to their fathers was found among those indicating mother's marital status as "deceased/grandmother." For these same adolescents related to their fathers the mean score found to be closest to the study mean (46.1) was among those indicating their mother's marital status as "widowed."

Table 43. Descriptive Comparison of Demographic Characteristic Mother's Marital Status and PAC Raw Score Means

Mother's Marital Status		Mother's Scores	Father's Scores
Deceased	Mean N Std. Deviation	1	52.0000 1
Deceased/ Grandmother	Mean N Std. Deviation	61.0000 1	37.0000 1
Divorced	Mean N Std. Deviation	56.1333 16 7.0393	42.7857 14 12.0011
Married	Mean N Std. Deviation	50.0000 16	62.0000 16
Single/Engaged	Mean N Std. Deviation	60.7500 21 5.5197	48.8571 15 10.7407
Widowed	Mean N Std. Deviation	54.1000 1 12.1348	45.0000 1 14.1327
I don't know	Mean N	52.0000	60.0000

Std. Deviation		1	1
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Father's Marital Status. Table 44 provides a descriptive comparison of the demographic characteristic "father's marital status" and the PAC raw score means. For adolescents indicating their father's marital status as "deceased" the mean score related to their mothers was 55.8 (N=8). For these same adolescents indicating their biological fathers were "deceased", some adolescents completed the PAC adolescent-father scale related to their stepfathers. The mean score for these adolescents related to their stepfathers was 43.0 (N=3). For adolescents indicating "divorced" the mean score related to their mothers was 53.3 (N=10). For these same adolescents the mean score related to their fathers was 45.3 (N=10). For adolescents indicating "married" the mean score related to their mothers was 58.1 (N=19). For these same adolescents the mean score related to their fathers was 48.7 (N=17). For adolescents responding "single and/or engaged" the mean score related to their mothers was 57.3 (N=17). For these same adolescents related to their fathers the mean score was 45.3 (N=16). For adolescents responding "widowed" related to father's marital status there was no response on the PAC adolescent-mother scale. For these same adolescents the mean score related to their fathers was 39.5 (N=2).

The highest mean score for adolescents related to their mothers was found among those indicating father's marital status as "married." The lowest mean score for adolescents related to their mothers was found among those indicating father's marital status as "divorced." The mean score closest to the study mean (56.6) for adolescents

related to their mothers was among those indicating their father's marital status to be "single and/or engaged."

The highest mean score for adolescents related to their fathers was found among those indicating father's marital status to be "married." The lowest mean score for adolescents related to their fathers was found among those indicating father's marital status as "widowed." The mean score closest to the study mean (46.1) for adolescents related to their fathers was among the group identifying father's marital status to be "divorced."

Table 44. Descriptive Comparison of Demographic Characteristic Father's Marital Status and PAC Raw Score Means

Father's Marital Status		Mother's Scores	Father's Scores
Deceased	Mean	55.8750	43.0000
	N	8	3
	Std. Deviation	12.2642	20.6640
Divorced	Mean	53.3000	45.3000
	N	10	10
	Std. Deviation	6.7173	9.2502
Married	Mean	58.1053	48.7059
	N	19	17
	Std. Deviation	7.9014	10.8557
Single/Engaged	Mean	57.3529	45.3125
	N	17	16
	Std. Deviation	10.2710	14.4717
Widowed	Mean		39.5000
	N		2
	Std. Deviation		17.6777
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Household Income. Table 45 provides a descriptive comparison of the demographic characteristic “household income” and the PAC raw score means. For adolescents responding “I don’t want to say” when asked about annual income the mean score related to their mothers was 59.2 (N=4). For these same adolescents the mean score related to their fathers was 52.7 (N=4). For adolescents indicating “\$10,000 to \$14,999” the mean score related to their mothers was 54.8 (N=7). For these same adolescents related to their fathers the mean score was 47.8 (N=8). For adolescents responding “\$15,000 to \$19,999” the mean score related to their mothers was 50.3 (N=3). For these same adolescents related to their fathers the mean score was 44.0 (N=2). For adolescents responding “\$25,000 to \$49,000” the mean score related to their mothers was 57.0 (N=3). For these same adolescents related to their fathers the mean score was 45.3 (N=3). For adolescents responding “I don’t know my income” the mean score related to their mothers was 56.4 (N=24). For these same adolescents related to their fathers the mean score was 46.4 (N=20). For adolescents responding “less than \$10,000 per year” the mean score related to their mothers was 58.6 (N=13). For these same adolescents related to their fathers the mean score was 42.5 (N=11).

The highest mean score for adolescents related to their mothers was found among adolescents reporting annual income as “I don’t want to say.” The lowest mean score for adolescents related to their mothers was found among those reporting annual income as \$15,000-\$19,999.” The mean score closest to the study mean (56.6) for adolescents related to their mothers was found among those indicating their annual household income status as “I don’t know my income.” The highest mean score for adolescents related to their fathers was among those reporting “I don’t want to say.” The

lowest mean score for adolescents related to their fathers was found among those reporting annual income as “less than \$10,000 per year.” The mean score closest to the study mean (46.1) for adolescents related to their fathers was found among those indicating their annual household income status as “I don’t know my income.”

Table 45. Descriptive Comparison of Demographic Characteristic Household Income and PAC Raw Score Means

Household Income		Mother's Scores	Father's Scores
I don't want to say	Mean N Std. Deviation	59.2500 4 6.3966	52.7500 4 10.2429
\$10,000 to \$14,999 per year	Mean N Std. Deviation	54.8571 7 6.7436	47.8750 8 11.1411
\$15,000 to \$19,999 per year	Mean N Std. Deviation	50.3333 3 14.5029	44.0000 2 7.0711
\$25,000 to \$49,000 per year	Mean N Std. Deviation	57.0000 3 6.0828	45.3333 3 17.9536
I don't know my income	Mean N Std. Deviation	56.4167 24 11.1586	46.4000 20 13.9261
Less than \$10,000 per year	Mean N Std. Deviation	58.6481 13 6.1986	42.5455 11 11.3786
Total	Mean N Std. Deviation	56.6481 56 9.1490	46.1250 48 12.3867

Household Composition. Table 46 provides a descriptive comparison of the demographic characteristic “household composition” and the PAC raw score means. For adolescents indicating they lived with “father only” the mean score related to their mothers was 61.0 (N=1). For these same adolescents the mean related to their fathers was 41.0 (N=1). For adolescents indicating “a combination of these people” the mean score related to their mothers was 54.8 (N=10). For these same adolescents the mean score related to their fathers was 44.7 (N=8). For adolescents indicating they live “alone” the mean score related to their mothers was 50.0 (N=1). For these same adolescents related to their fathers the mean score was 25.0 (N=1). For adolescents indicating “both parents” the mean score related to their mothers was 65.7 (N=4). For these same adolescents the mean score related to their fathers was 51.7 (N=4). For adolescents indicating “grandmother” the mean score related to their mothers was 48.0 (N=1). There was no response on the adolescent-father scale related to the household composition of “grandmother.” For adolescents indicating household composition to be “husband or boyfriend” the mean score related to their mothers was 55.3 (N=16). For these same adolescents the mean score related to their fathers was 45.8 (N=16). For adolescents responding “mother only” the mean score related to their mothers was 59.5 (N=12). For these same adolescents the mean score related to their fathers was 46.5 (N=9). For adolescents indicating “other people” for household composition the mean score related to their mothers was 54.4 (N=9). For these same adolescents the mean score related to their fathers was 47.7 (N=9).

The highest mean score of adolescents related to their mothers was among those indicating household composition as “both parents.” The lowest mean score of

adolescents related to their mothers was found among those indicating “grandmother.” The mean score closest to the study mean (56.6) related to their mothers was found among adolescents indicating their household composition to be “husband or boyfriend.”

The highest mean score of adolescents related to their fathers was among those indicating household composition as “Both parents.” The lowest mean score of adolescents related to their fathers was found among those indicating household composition as living “alone.” The mean score closest to the study mean (46.1) related to their fathers was found among adolescents indicating their household composition to be “husband or boyfriend.”

Table 46. Descriptive Comparison of Demographic Characteristic Household Composition and PAC Raw Score Means

Household Composition		Mother's Scores	Father's Scores
Father Only	Mean N Std. Deviation	61.0000 1	41.0000 1
A combination of These people	Mean N Std. Deviation	54.8000 10 10.0311	44.7500 8 12.6124
Alone	Mean N Std. Deviation	50.0000 1	25.0000 1
Both parents	Mean N Std. Deviation	65.7500 4 4.9244	51.7500 4 8.7702
Grandmother	Mean N Std. Deviation	48.0000 1	
Husband or boyfriend	Mean N Std. Deviation	55.3125 16 8.5066	45.8750 16 11.5981

Mother only	Mean	59.5000	46.5556
	N	12	9
	Std. Deviation	12.3097	15.9852
Other people	Mean	54.4444	47.7778
	N	9	9
	Std. Deviation	12.3097	12.0600
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Birth Control. Table 47 provides a descriptive comparison of the demographic characteristic “birth control” and the PAC raw score means. For adolescent indicating “I have never used birth control” the PAC score related to her mother was 58.5 (N=1). For this same adolescent related to her father the PAC score was 49.0 (N=1). For adolescents responding “I have used some type of birth control” the mean score related to their mothers was 55.1 (N=55). For these same adolescents related to their fathers the mean score was 46.5 (N=47).

The highest PAC score for adolescents related to their mothers was found among those indicating “I have never used birth control.” The lowest mean score for adolescents related to their mothers was found among those indicating “I have used some type of birth control.” The mean score closest to the study mean (56.6) for adolescents related to their mothers was found among those indicating “I have used some type of birth control.” The highest mean score for adolescents related to their fathers was found among those indicating “I have never used birth control.” The lowest mean score for adolescents related to their fathers was found among those indicating “I don’t use any birth control now.” The mean score closest to the study mean (46.1) for adolescents related to their fathers was found among those indicating “I have used some type of birth control.”

Table 47. Descriptive Comparison of Demographic Characteristic Birth Control and PAC Raw Score Means

Birth Control		Mother's Scores	Father's Scores
I have never used birth control	Mean	58.5000	49.0000
	N	2	2
	Std. Deviation	3.5355	11.3137
I have used some type of birth control	Mean	55.1724	46.5000
	N	29	26
	Std. Deviation	10.2576	11.4691
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Type of Birth Control. Table 48 provides a descriptive comparison of the demographic characteristic “type of birth control” and the PAC raw score means. For adolescents indicating they have used “birth control pills” the mean score related to their mothers was 58.3 (N=26). For these same adolescents the mean score related to their fathers was 47.3 (N=23). For adolescents indicating “condoms only” the mean score related to their mothers was 53.1 (N=7). For these same adolescents the mean score related to their fathers was 52.2 (N=5). For adolescents indicating “Depo-Provera shots” the mean score related to their mothers was 58.7 (N=9). For these same adolescents the mean score related to their fathers was 39.5 (N=10). For adolescents indicating use of “pills/condoms” the mean score related to their mothers was 53.5 (N=7). For these same adolescents related to their fathers the mean score was 48.6 (N=6). For adolescents indicating use of “Pills/shots” the mean score related to their mothers was 52.7 (N=4). For these same adolescents related to their fathers the mean score was 43.4 (N=3). For the adolescent indicating “other” related to type of birth control used previously, the PAC

score related to her mother was 54.0 (N=1). For this same adolescent related to her father the PAC score was 48.0 (N=1).

The highest mean score of adolescents related to their mothers was found among those indicating use of “Depo-Provera shots.” The lowest mean score of adolescents related to their mothers was among adolescents indicating use of pills/shots. The mean score closest to the study mean (56.6) for adolescents related to their mothers was among those indicating use of “birth control pills.”

The highest mean score of adolescents related to their fathers was found among those indicating use of “condoms only.” The lowest mean score of adolescents related to their fathers was found among those indicating use of “Depo-Provera shots.” The mean score closest to the study mean (46.1) for adolescents related to their fathers was among those indicating use of “birth control pills.”

Table 48. Descriptive Comparison of Demographic Characteristic Type of Birth Control and PAC Raw Score Means

Type of Birth Control		Mother's Scores	Father's Scores
Birth Control Pills	Mean	58.3846	47.3043
	N	26	23
	Std. Deviation	7.4031	12.7616
Condoms Only	Mean	53.1429	52.2000
	N	7	5
	Std. Deviation	9.2453	4.9699
Depo-Provera shots	Mean	58.7778	39.5000
	N	9	10
	Std. Deviation	8.4525	14.3933
Pills/Condoms	Mean	53.5714	48.6667
	N	7	6
	Std. Deviation	8.7342	11.8603
Pills/Shots	Mean	52.7500	43.3333

	N	4	3
	Std. Deviation	19.8725	10.9697
Other	Mean	54.0000	48.0000
	N	1	1
	Std. Deviation		
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Previous Pregnancies. Table 49 provides a descriptive comparison of the demographic characteristic “previous pregnancies” with the PAC raw score means. For adolescents indicating “0” previous pregnancies the mean score related to their mothers was 56.6 (N=34). For these same adolescents related to their fathers the mean score was 47.1 (N=31). For adolescents indicating “1” previous pregnancy the mean score related to their mothers was 60.0 (N=12). For these same adolescents related to their fathers the mean score was 40.7 (N=9). For adolescents indicating “2” previous pregnancies the mean score related to their mothers was 53.5 (N=6). For these same adolescents the mean score related to their fathers was 47.8 (N=6). For adolescents indicating “3” previous pregnancies the mean score related to their mothers was 46.0 (N=2). For these same adolescents related to their fathers the mean score was 49.0 (N=2).

The highest mean score for adolescents related to their mothers was found among those indicating “1” previous pregnancy. The lowest mean score for adolescents related to their mothers was found among those indicating “3” previous pregnancies. The mean score closest to the study mean (56.6) for adolescents related to their mothers was found among those indicating “0” previous pregnancies.

The highest mean score for adolescents related to their fathers was found among those indicating “3” previous pregnancies. The lowest mean score for adolescents related

to their fathers was found among those indicating “1” previous pregnancy. The mean score closest to the study mean (46.1) was found among those indicating “1” previous pregnancy.

Table 49. Descriptive Comparison of Demographic Characteristic Previous Pregnancies and PAC Raw Score Means

Previous Pregnancies		Mother's Scores	Father's Scores
0	Mean	56.647134	47.1613
	N	34	31
	Std. Deviation	9.6605	12.6520
1	Mean	60.0000	40.7778
	N	12	9
	Std. Deviation	6.7689	15.1557
2	Mean	53.5000	47.8333
	N	6	6
	Std. Deviation	6.8044	7.0261
3	Mean	46.0000	49.0000
	N	2	2
	Std. Deviation	14.1421	0.0000
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Feelings about Pregnancy. Table 50 provides a descriptive comparison of the demographic characteristic “feelings about pregnancy” and the PAC raw score means. For adolescents indicating their feelings about this pregnancy were “happy” the mean score related to their mothers was 56.3 (N=43). For these same adolescents the mean score related to their fathers was 46.1 (N=38). For the adolescent indicating “I’m not sure how I feel” the PAC score related to her mother was 43.0 (N=1). For this same adolescent the PAC score related to her father was 31.0 (N=1). For adolescents indicating “I have mixed feelings” the mean score related to their mothers was 59.4 (N=10). For these same adolescents the mean score related to their fathers was 47.6 (N=9).

The highest mean score for adolescents related to their mothers was found among those indicating “I have mixed feelings” about this pregnancy. The lowest mean score for adolescents related to their mothers was found among those indicating “I’m not sure how I feel.” The mean score closest to the study mean (56.6) was found among those indicating feeling “happy” about this pregnancy.

The highest mean score for adolescents related to their fathers was found among those indicating “I have mixed feelings.” The lowest mean score for adolescents related to their fathers was found among those indicating “I’m not sure how I feel.” The mean score closest to the study mean (46.1) was found among those indicating they are “happy” about this pregnancy.

Table 50. Descriptive Comparison of Demographic Characteristic Feelings About Pregnancy and PAC Raw Score Means

Feelings About Pregnancy		Mother's Scores	Father's Scores
Happy	Mean	56.3256	46.1579
	N	43	38
	Std. Deviation	9.6996	13.1489
I ' m not sure how I feel	Mean	43.0000	31.0000
	N	1	1
	Std. Deviation		
I have mixed feelings	Mean	59.4000	47.6667
	N	10	9
	Std. Deviation	4.9261	8.3964
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Care of Baby. Table 51 provides a descriptive comparison of the demographic characteristic “care of baby” and the PAC raw score means. For adolescents indicating “I am not sure” of personal ability to care for a baby the mean score related to their mothers was 53.5 (N=4). For these same adolescents the mean score for adolescents related to their fathers was 41.7 (N=4). For adolescents indicating “yes” to feeling able to care for a baby the mean score related to their mothers was 56.9 (N=50). For these same adolescents the mean score related to their fathers was 46.5 (N=44).

The highest mean score related to their mothers was found among adolescents believing “yes” in terms of ability to care for a baby. The lowest mean score was found among adolescents related to their mothers who responded “I am not sure” about ability to care for a baby. The mean score for adolescents related to their mothers closest to the

study mean (56.6) was found among those stating “yes” they were sure they could care for a baby.

The highest mean score related to their fathers was found among adolescents responding “yes” in terms of ability to care for a baby. The lowest mean score was found among adolescents related to their fathers who responded “I am not sure” about ability to care for a baby. The mean score for adolescents related to their fathers which was closest to the study mean was among those responding “yes.”

Table 51. Descriptive Comparison of Demographic Characteristic Care of Baby and PAC Raw Score Means

Care of Baby		Mother's Scores	Father's Scores
I am not sure	Mean	53.5000	41.7500
	N	4	4
	Std. Deviation	7.5498	17.5760
Yes	Mean	56.9000	46.5227
	N	50	44
	Std. Deviation	9.2830	12.0087
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Type of Insurance. Table 52 provides a descriptive comparison of the demographic characteristic “type of insurance” and the PAC raw score means. For adolescents who responded they have “another type of insurance” the mean score related to their mothers was 66.5 (N=2). For these same adolescents related to their fathers the mean score was 49.0 (N=2). For adolescents who responded “I don’t know” about personal insurance the mean score related to their mothers was 56.2 (N=4). For these same adolescents related to their fathers the mean score was 42.6 (N=3). For adolescents responding “Medi-Cal or CPSP” related to their mothers the mean score was 56.2 (N=48). For these same adolescents related to their fathers the mean score was 46.2 (N=43).

The highest mean score for adolescents related to their mothers was found among those indicating “another type of insurance.” The lowest mean score for adolescents related to their mothers was found among those indicating “I don’t know.” The mean score closest to the study mean (56.6) was found among those indicating “Medi-Cal or CPSP.”

The highest mean score for adolescents related to their fathers was found among those indicating “another type of insurance.” The lowest mean score for adolescents related to their fathers was found among those indicating “I don’t know.” The mean score closest to the study mean (46.1) was found among those indicating “Medi-Cal or CPSP.”

Table 52. Descriptive Comparison of Demographic Characteristic Type of Insurance and PAC Raw Score Means

Type of Insurance		Mother's Scores	Father's Scores
Another Type of Insurance	Mean	66.5000	49.0000
	N	2	2
	Std. Deviation	7.7782	11.3137
I don't know	Mean	56.2500	42.6667
	N	4	3
	Std. Deviation	10.0125	15.3080
Medi-Cal or CPSP	Mean	56.2708	46.2326
	N	48	43
	Std. Deviation	9.0782	12.4992
Total	Mean	56.6481	46.1250
	N	56	48
	Std. Deviation	9.1490	12.3867

Table 53 provides a summary description of the sample population used in the comparison of demographic characteristics and PAC score means for adolescents related to their mothers and adolescents related to their fathers.

Table 53. Summary Description of Comparison of Demographic Characteristics/PAC Score Means

	CASES					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Mom's Scores - Location	54	96.4%	2	3.6%	56	100.0%
Dad's Scores - Location	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Race	54	96.4%	2	3.6%	56	100.0%
Dad's Scores - Race	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Age	54	96.4%	2	3.6%	56	100.0%
Dad's Scores - Age	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Birthdate	54	96.4%	2	3.6%	56	100.0%
Dad's Scores - Birthdate	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Pregnancy Status	54	96.4%	2	3.6%	56	100.0%

Dad's Scores - Pregnancy Status	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Marital Status	53	94.6%	3	5.4%	56	100.0%
Dad's Scores - Marital Status	48	85.7%	8	14.3%	56	100.0%
Mom's Scores - Language	54	96.4%	2	3.6%	56	100.0%
Dad's Scores - Language	48	85.7%	8	14.3%	56	100.0%
Mom's scores - First language	54	96.4%	2	3.6%	56	100.0%
Dad's scores - First language	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Religion	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Religion	48	85.7%	8	14.3%	56	100.0%
Mom's scores – Mom's marital status	54	96.4%	2	3.6%	56	100.0%
Dad's scores – Mom's marital status	48	85.7%	8	14.3%	56	100.0%
Mom's scores – Dad's marital status	54	96.4%	2	3.6%	56	100.0%
Dad's scores – Dad's marital status	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Income	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Income	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Household composition	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Household composition	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Birth control	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Birth control	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Type of birth control	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Type of birth control	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Previous pregnancies	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Previous pregnancies	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Prenatal care	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Prenatal care	48	85.7%	8	14.3%	56	100.0%
Mom's scores - feelings about pregnancy	54	96.4%	2	3.6%	56	100.0%
Dad's scores - feelings about pregnancy	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Care of baby	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Care of baby	48	85.7%	8	14.3%	56	100.0%
Mom's scores - Type of insurance	54	96.4%	2	3.6%	56	100.0%
Dad's scores - Type of insurance	48	85.7%	8	14.3%	56	100.0%

Discussion of Quantitative Statistical Data

Table 54 provides a description of the Pearson correlation of the demographic characteristic “age” with PAC scores for adolescents related to their mothers and adolescents related to their fathers. This correlation was done to determine if there was a measurable relationship between the numerical variables in this study. The correlation of the demographic characteristic “age” with the PAC score of adolescents related to their mothers was determined to be $r = -0.066$ and with their fathers $r = -0.040$. These scores show no correlation or relationship between these variables and determines these relationships to be of no significance. Figures 23 and 24 portray a graphic representation of this correlation data.

Table 54. Pearson Correlation of the Demographic Characteristic Age PAC Scores

		Age	Adol re: Mothers	Adol re: Fathers
Age	Pearson	1.000	-0.066	-0.040
	Sig. (2-tailed)	.	0.635	0.785
	N	56	54	48
Mscore	Pearson	-0.066	1.000	0.113
	Sig. (2-tailed)	0.635	.	0.453
	N	54	54	46
Dscore	Pearson	-0.040	0.113	1.000
	Sig. (2-tailed)	0.785	0.453	.
	N	48	46	48

Figure 23. Scatterplot of Pearson Correlation of Age and Adolescent-Mother PAC Scores

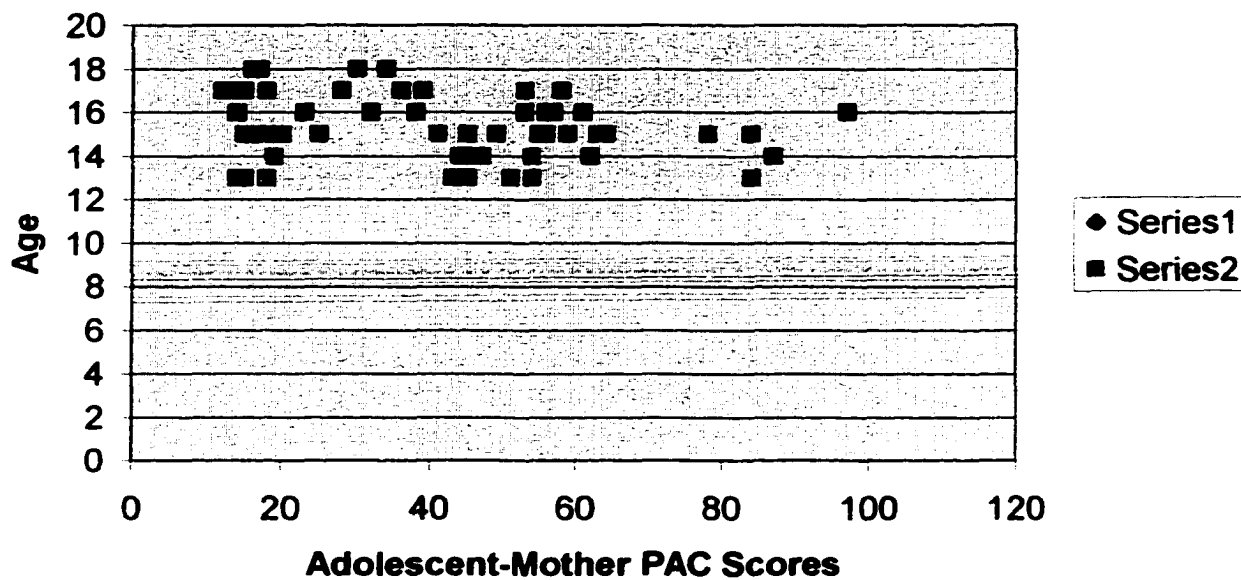


Figure 24. Scatterplot of Pearson Correlation of Age and Adolescent-Father PAC Scores

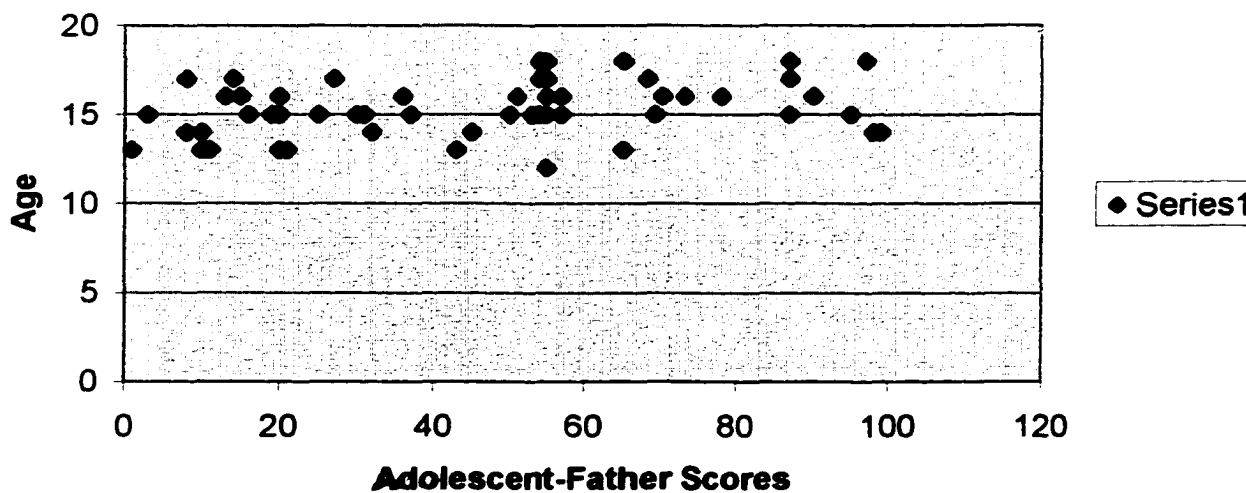


Table 55 provides a t-test comparison of mean PAC communication scores of adolescents related to their mothers and their fathers. This data is statistically significant (0.453), with a correlation of 0.113, confirming that adolescents scored much lower on the PAC communication scale related to their fathers than they did with their mothers.

Table 55. T-test Comparison of PAC Scores for Adolescents Related to their Mothers and Fathers

		Mean	N	Standard Deviation	Standard Error Mean	Correlation	Significance		
Pair 1	Mom	56.2609	46	9.5042	1.4013	0.113	0.453		
	Dad	46.4130	46	12.2992	1.8134				
		Mean	Standard Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Mom	9.8478	14.6666	2.1625	5.4924	14.2033	4	4	0.000
	Dad						.554	5	

Identification and Discussion of Qualitative Data

Table 56 identifies six themes along with specific examples arising from the qualitative communication data, which was collected from the audio taped interviews earlier described.

Lack of communication with fathers.

Theme number one identified a lack of significant communication between adolescents and their fathers both prior to pregnancy and during the pregnancy. Rationale for this lack of communication included not knowing their fathers, as in the examples of subject ID#'s 5,7,13 because he was in prison or left the home when the child was young. Fathers were also identified as being strict and hard to talk to along with adolescents being afraid to talk to them for fear of getting in trouble as in the

examples of ID #'s 6 and 20. Subject ID # 41 talked about being afraid of his judgment and when he was mad he would “degrade.” Also, the subject had to be on guard as to the mood of her father and not ask him for something during the times he was upset. One adolescent stated she just did not want to communicate with her dad, as identified in the example ID # 33. When this data is compared with the PAC scores of adolescents related to their fathers in this sample population it is easy to explain the low scores, and thereby the low perception on the part of adolescents related to communication with their fathers. Lack of communication with mothers.

Theme number two identified a lack of effective communication of adolescents with their mothers both prior to pregnancy and throughout the pregnancy. Rationale for this seems to include conflict and communication problems between the child and the mother during the growing up years as in example subject ID #'s 5 and 15. In ID # 5 there was a feeling on the part of the adolescent of rebelliousness, not caring what her mother thought, and very little communication. ID # 15 states she didn't talk to either parent before she got pregnant. She had problems with her mom and liked to be alone. Other difficulties identified by ID # 13 included a feeling of rejection and shoved away if she said something which hurt her mothers' feelings. So this mom was perceived by her adolescent as having too many of her own needs to be able to cope with her needs. This subject also identified herself as sensitive in communication. Her mother talked around issues so the adolescent felt she didn't get straight answers, making good communication even more difficult. Subject ID # 28 felt that communication with her mother was less when they used to live together than now. However, she does not consider sharing problems with her mother but rather keeps them to herself and tries to work them out on

her own. Subject ID# 41 talked with her mom more than with her dad when she was young. However, mom was not in charge and could not make decisions regarding her when dad came home. This data helps explain the lower than normed PAC adolescent-mother quantitative scores related to adolescent perception of adolescent-mother communication patterns.

Unstable family relationships affected communication.

Theme number three identifies how unstable family relationships affected parent-adolescent communication patterns. All but two of the thirty subjects interviewed identified some pattern of unstable family relationships. Some of the following examples provide specifically how these relationships affected communication. Subject ID # 8 does not live with or see her mom on any kind of a regular basis, and doesn't care to see her often. She lives with her aunt and feels communication would be better only if she saw her mother more often. Subject ID # 10 lost her mom to death 14 years ago, and doesn't see or communicate with her father often since he lives in Mexico. ID # 13 actually lives in her mother's house with various other people including her sister, but her mother doesn't live there because she is off in Arizona trying to get reconnected with her biological father who recently got out of prison. The subject tries not to communicate too much because her mom doesn't seem to be too open when it comes to communication. Subject ID # 41 felt that living with her mother was easy but living with her father was an abusive time in her life. Her mother worked a lot and did not have a lot of time to give her for communication. Subject ID # 41 lived with her mom then went to live with her grandmother. She didn't like dealing with the relationship her mother had with her

common law husband. She indicated she was afraid to communicate news of her pregnancy to her mom when she wasn't around her.

These examples demonstrate an unstable growing-up environment where immediate family members rarely are living together on a regular basis, poor parental relationships making for poor parent-child relationships, violence in families, and children living with extended family members and various other people.

Poor relationships led to difficulty in communicating about the pregnancy.

Theme number four identifies how poor parent-adolescent relationships led to difficulty in adolescents communicating with their parents about being pregnant. Examples include Subject ID # 7 who indicated her mother didn't have any idea her daughter was pregnant and she was mad. But she had an instinct and "knew" when the subject was going to the doctor's that she was pregnant. Subject ID # 11 didn't really want her parents to know what was going on in her life, and didn't think she would be able to tell them about an abortion. Only good things would be acceptable to her parents. Also this subject felt responsible for how her parents feel about her and didn't want them to feel bad. Subject ID # 15 informed her sister about the pregnancy, after which the sister informed the subject's mother. The other family members made the decision for the subject about what to do and what not to do in terms of moving out by the family and not having an abortion. Subject ID # 34 made the excuse about going to the doctor to get birth control, when in reality the purpose was a pregnancy test. The father found out through a friend talking about the pregnancy in the car afterwards. Subject ID # 38 was afraid to tell her mother about the pregnancy, since she hadn't lived with her or communicated with her for awhile. An aunt told the mother about the pregnancy and that

stimulated a renewed relationship. This data suggests that poor relationships between parents and adolescents prior to the pregnancy fostered difficulty communicating about the pregnancy when it occurred.

Pregnancy was perceived as improving relationships and communication.

Theme number five suggests that the adolescent pregnancy was perceived to have greatly improved the parent-adolescent relationships and communication patterns. Subject ID #'s 6, 7, 12, 15, 16 all discuss how the relationships have changed for the better, how communication has improved and how subjects can talk with parents about everything better since the pregnancy occurred. Other aspects of relationships included how parents and subjects have much more in common, and how parents treat subjects as if they are older and how they have become "like best friends." ID # 16 feels her mother is happy to be having her first grandchild and she is able to be more open with her mother. ID # 24 feels good because her mother takes care of her more and is always concerned about if she needs something. ID # 14 was excited because her mother buys her all kinds of stuff for the baby. She adds that her mother was really mad at first but has gotten over that. ID #'s 34 and 35 talk about how great their parents are and how they help out a lot, and that they never "put me down" anymore. ID # 35 states "they're there for me more than before." ID # 38 feels her pregnancy is what woke her mother up and helped her to straighten out her own life. This data suggests most parent-adolescent relationships benefited from the pregnancy and that pregnancy was seen to be a blessing which improved parent-adolescent communication.

Communication support often comes from people other than parents.

Theme number six identifies the concept that communication support for these adolescents often comes from people other than parents. Subject ID # 6 identifies her mother-in-law as the person with whom communication is most effective currently. ID # 12 identifies her boyfriend as the main communication confidant. ID #'s 13 and 16 identify their sisters as being most supportive related to communication. ID # 14 communicates best with her grandma and aunt. ID # 29 communicates well with brother and boyfriend's relatives. ID # 35 has communication support from friends, siblings, and a boyfriend. This data suggests that communication support for these adolescents is not dependent upon the parent-adolescent relationship and that other people are often more supportive than are parents.

Table 56. Themes and Examples of Qualitative Communication Data

Theme #1: Lack of Communication With Fathers

- ID#5 “I didn’t communicate with my dad because I didn’t know him.”
- ID#6 “It was really hard for me to talk to my dad because he was really strict, and if I wanted to say something I had to think it all over two or three times before I said it, so I wouldn’t get into trouble.”
- ID#7 “I didn’t know my dad really, he’s in prison. I only saw him a couple of times.”
- ID#13 “My biological father left before I was 5 years old. It seemed like he’d always hit my mom when my mom was holding me. I used to write to him when he was in prison but I don’t want him now.”
- ID#20 “He’s a hard person to talk with because he would get mad easy. He gets real mad easy. I was afraid to talk to him sometimes. That’s why I always talked to my mom.”
- ID#33 “I just never liked talking to my dad, really.”
- ID#41 “I’m not afraid of my dad, just his opinions. I’m afraid of his judgment. He’s strong. He’s quiet. He’s a really calm person unless he was mad; and then he would degrade. I’d have to really pay attention to what was happening around me, and if I knew my dad was upset about something, I knew I wasn’t going to ask him for something because I knew he would probably get mad.”
- ID#49 “My father won’t talk to us.”
-

Theme #2: Lack of Communication With Mothers

- ID#5** “We didn’t get along that good (before the pregnancy). We didn’t talk a lot. We fought a lot. I would just go do what I wanted to do because I didn’t care what she thought.”
- ID#13** “It’s kind of hard to tell my mom lots of things because her feelings are hurt really easily, and then when she gets mad or upset, she doesn’t want to talk no more. Every time I would get into trouble I would get shoved away. It’s kind of hard to talk to my mom because she’s a very lonely person. And I can’t be talked to too loudly because my feelings are hurt real easily, and I’m a sensitive person. My mom would try to go around the subject. So I’d never really get any straight answers.”
- ID#15** “Before I got pregnant I wasn’t talking to either one. My dad had problems and went to prison. And me and my mom were just having problems and I liked being along.”
- ID#28** “I have a tendency to have less communication (with my mother) when we lived together. I have a tendency when I have problems to just keep it to myself and deal with it. If I can’t figure them out, how can other people help me figure them out? That’s just the way I feel, and I still feel that way sometimes.”
- ID#41** “I talked the most with my mom. She was there more when I was young...My mom was the boss when dad wasn’t home. But when my dad got home it was up to him.”
-

Theme #3: Unstable Family Relationships Affected Communication

- ID# 8 “I don’t live with my mom. I live with my aunt. I don’t really see my mom. When I see her we have a good relationship, but I just don’t care to see her a lot now. We would communicate better if I would see her more often.
- ID#10 “I don’t have my mom. She died 14 years ago. And my father, I don’t communicate with him because he lives in Mexico and sometimes he comes here. I don’t have too much communication with him.”
- ID#13 “I’m living in my mother’s house but my mother doesn’t live there. I live with my boyfriend, my sister, my sister’s baby, and Annette. My mom moved to Arizona because she wanted to get back together with my biological father because he just got out of prison. Our communication is okay I guess, but it could be better. I can tell my mom anything, but I try not to because it’s not like my mom to be more open.”
- ID#41 “Living with my mom was pretty easy. But my dad, no. I had to stay with my dad for a couple of months and it was just abuse. It was hard to find time to talk to my mom, but she was always there when she could get the time because she worked all the time.”
- ID#43 “I lived with my mom then my grandmother. My mom was separated from my dad, then she got with her common-law husband because they’ve been together so long, but she was having problems with him, and I didn’t like him so I went and lived with my Grandma. I was afraid to tell my mom, like when I got pregnant and stuff like that...because I didn’t know how she would react only because she wasn’t around.”
-

**Theme #4: Poor Relationships Led to Difficulty in Communicating
About the Pregnancy**

- ID#11** “I really don’t want them to know what’s going on in my life. Well, like if I had an abortion, I don’t think I could tell them (parents). I can tell them the good things going on in my live. I didn’t want them to know (about the pregnancy) because I don’t want them to be sad for me and feel bad. They should be happy. What’s always been a bad thing is what’s going on and they pause, so sad and everything.”
- ID#15** “I called and told my sister I was pregnant...My sister told my mom that I was pregnant. They wanted me to come out here and move and I was telling them “no, I think I’ll have an abortion.” And my mom, “you have an abortion, I’m not ever going to talk to you.” So they made me move out here so they would know I’d do good, and they could help me.”
- ID#34** “I told them I needed to go to the doctor’s for my birth control. And my dad was the one who drove me there, and they told me I was pregnant, and I went outside and my friend was listening, so she kind of liked talking about it in the car, so my dad found out.”
- ID#36** “I was so afraid that she was going to make, I mean, I don’t think my mom, my mom doesn’t believe in abortions, but I thought that was what she would make me do because I was so young. So I didn’t want to tell her. I wanted to hide it for as long as I could; and I couldn’t hide it for very long. But everything ended up being okay.”
- ID#38** “I was afraid to tell my mother about being pregnant. I had been moving around living with different friends and hadn’t talked to her for a while. One day she came over because my aunt had told her I was pregnant.”
-

Theme #5: Pregnancy was Perceived by Adolescents as Improving Relationships and Communication

- ID#6** “Yeah, in fact it’s kind of changed because now we can talk and everything without arguing or saying anything bad. It will be better then, we’re going to have more stuff in common.”
- ID#7** “I think we communicate a little bit better now because she treats me a little bit older now.”
- ID#12** “She’s (my mother) fine about it. She’s real open. She’s understanding and he helps me out a lot. She knows what I’m going through and stuff. It seems like I’m more open with my mom now than I have been before. So I think it’s fine. I think she’s more open now.”
- ID#14** “I talk to my mom all the time and she buys me all kinds of stuff. She was real mad at first, but she’s gotten over it.”
- ID#15** “Well, before we didn’t communicate at all. Now we’re like best friends. We don’t even stay at our house. We’re always at her house. It took pregnancy to make her (my mother) talk to me. Before I was pregnant I was a fighter. I’d be out there boxing the girls on the streets and stuff. Now I’m pregnant and can’t fight. I’m not a fighter no more. My mom’s happy with that.”
- ID#16** “She (my mother) was happy because it’s her first grandchild, and she wanted to be a grandmother...I’m more open with her now, and she’s more understanding. We have a better relationship now...”
- ID#24** “She takes care of me more now. She always asks if I need this or if I need that.”
- ID#34** “My mom tried to tell me like “this is going to be so hard,” and “are you sure you really are ready for this?” and “are you sure you don’t want to give the baby up for adoption or have an abortion?” And then the next day, she was happy about it. She told me she wanted another baby but she couldn’t have any more kids because my dad got ‘fixed’.”
- ID#35** “They’re (parents) really great and help out a lot, and a big weight was lifted off, and no one ever put me down or anything. They’re there for me more than before.”

ID#38 “My pregnancy helped my mother straighten out her own life.”

Theme #6: Communication Support Often Comes From People Other
Than Parents

- ID#6 “The person I communicate more will be mother-in-law because I could talk to her more than what I could to my mom, or whatever. She understands more and yeah, she’s the one right now.”
- ID#12 “He’s (boyfriend) the main one that supports me. He’s the main one that I can talk to all the time. He’s very supportive.
- ID#13 “Year, my sister. Because she’s been through a lot with her having a kid. She’s like my back-up. She’s there for me.”
- ID#14 “My aunt Sylvia and my grandma. I communicate with them good, especially my grandma. I tell her everything.”
- ID#16 “I talk to my sister. She’s older. And I talk to my fiancé; I get an honest answer from him. I could talk to them about things that I can’t talk to my mother about. I talk to them about everything.”
- ID#29 “I communicate mostly with my little brother and my boyfriends’ cousin and aunt.”
- ID#33 “My sister and I we talk about anything we want to. She’s fifteen and she already had a baby. Her baby’s three months.”
- ID#35 “I talk to my friend and I’m friends with her sister as well, as then my brother and my sister. My boyfriend is like my best friend too.”
-

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter includes a summary of the research design and method as well as the findings, conclusions, implications for nursing practice, education, and administration, and recommendations for further research.

Summary of Study

The purpose of this non-experimental, descriptive, triangulated research was to examine the relationship between the perceived quality and effectiveness of parent-adolescent communication and pregnancy from the perspective of pregnant adolescent women in the Banning/Beaumont area of southern California. The research design allowed for collection of data utilizing the PAC tool to score adolescent perceptions of adolescent-father and adolescent-mother communication effectiveness. The demographic tool provided specific demographic variables to compare with the PAC scores, and the utilization of qualitative interviews obtained personal feelings and perspectives of adolescents related to parent-adolescent communication patterns, which were used to help explain the PAC scores.

The theoretical framework for this study was based on adolescent and family developmental theories, family communication theory, and health-behavior theory. This study was designed to add to the knowledge base regarding pregnant adolescent's perceptions of their family communication and functioning and how these factors influence their early sexual activity and pregnancy status. It was hoped that this

research would contribute to the implementation and evaluation of effective programs for parents and teens in relationship to the teen pregnancy issue, in the effort to help decrease the teen pregnancy rate in the United States.

Basic assumptions important to this study included the following:

1. Parents and families influence choices adolescent children make about their own sexual behavior.
2. Parents who give clear messages about early sexual involvement have children who are less likely to have early intercourse, and therefore are less likely to experience adolescent pregnancy.
3. Adolescents who perceive higher positive levels of parent-adolescent communication within their families will be less likely to experience adolescent pregnancy.
4. Adolescents who are pregnant are more likely to perceive lower levels of positive parent-adolescent communication patterns within their families than are their non-pregnant counterparts.

The relationship between the perceived quality and effectiveness of parent-adolescent communication and pregnancy from the perspective of pregnant adolescent women was measured in the following ways. A sample of 56 pregnant female subjects volunteered to participate in the study. These subjects were recruited from four sites in the Banning/Beaumont area of southern California including Banning High School, the Family Care Center, Dr. Yoo's clinic, and Rancho Paseo Medical Group clinic. Criteria for inclusion in the sample included: a) being pregnant and between the ages of 13-19; b) subjects who spoke and read English without difficulty c) willingness to participate as demonstrated by signing a consent form and

completing the research packet. The data was collected on site at each location during school hours or after a prenatal clinic appointment. Verbal and written consent was obtained prior to completion of any data collection for written and verbal aspects of the data collection. Subjects who completed the written instruments could decide whether or not they also wished to participate in the verbal, qualitative portion of the data collection. Fifty-six subjects completed the written instruments. Thirty of the fifty-six subjects consented to the qualitative interview after completion of the written instruments.

The data collection instruments used to measure adolescent perceptions of parent-adolescent communication included a demographic questionnaire, the Parent-Adolescent Communication Scale (Olson et. al, 1985) and the qualitative interview guide.

A descriptive analysis of the sample population related to each demographic variable was conducted, with identification of a mean profile of the pregnant adolescent demographic characteristics.

Individual PAC scores for adolescents related to their mothers and adolescents related to their fathers were tabulated and compared with established norms set up by the PAC scale, (Olson, 1985).

A descriptive comparison of each demographic variable with adolescent-mother and adolescent-father PAC scores was discussed and interpreted. Pearson

correlation was run for the demographic characteristic age and the PAC scores for adolescents related to their mothers and fathers. A t-test was run on the subjects PAC scores related to both their mothers and fathers.

A descriptive analysis and comparison was made between the qualitative interview data themes and PAC scores for adolescents related to their mothers and adolescents related to their fathers.

Quantitative data was analyzed using the SPSS statistical package. The mean demographic subject profile included a mean location of *Banning High School*, ethnicity predominately *Hispanic*, a mean age of *19 years* and birth-date in *1980*, pregnancy status that of being *pregnant now for the first time*, marital status predominately *single/and or engaged*, primary language *English*, first language learned *English*, religious preference *protestant*, church attendance patterns identified as attending *sometimes*, mother's marital status *widowed*, father's marital status *married*, household income *I don't know our income*, household composition or with whom do you live included a *husband/boyfriend*, use of birth control *I have used some birth control*, birth control type most commonly used was *birth control pills*, previous pregnancies *none*, feelings about the pregnancy predominately *happy*, feelings about how prepared the subject felt about taking care of the baby was *well prepared*, and type of insurance *Medi-cal/CPSP*.

The PAC raw scores for adolescents related to their mothers ranged from a high score of 72 to a low score of 23. The mean score was 56.6, median 59.5, mode 63.0 (SD = 9.14). The PAC raw scores for adolescents related to their fathers ranged from a

high score of 62 to a low score of 20. The mean score was 46.1, median 49.5, mode 52.0 (SD = 12.38). These raw scores were converted to percentile scores in order to be compared with the PAC normed instrument scales. The mean percentile score for adolescents related to their mothers was 60 (mean score 56.6). The mean percentile score for adolescents related to their fathers was 49 (mean score 46.1).

These scores were compared with the PAC normed instrument mean scores. The mean raw score for adolescents related to their mothers was 71 (percentile score 66.56). The mean raw score for adolescents related to their fathers was 67 (percentile score 63.74).

These study population scores for adolescents related to their mothers and their fathers were considerably lower than the PAC normed instrument mean scores.

A description and comparison of each sample mean demographic characteristic with study PAC scores of adolescents related to their mothers and fathers was summarized in terms of the variable's highest mean score, lowest mean score, and the variable score closest to the study mean.

A Pearson correlation of the demographic characteristic age with study PAC scores for adolescents related to their mothers and fathers was conducted. Both values were negative and neither one showed any significant correlation between the variables. A t-test confirmed with statistical significance that adolescents scored much lower related to perceptions of communication with their fathers than with their mothers.

Qualitative interview data identified the following themes including: 1) lack of communication with fathers 2) lack of communication with mothers 3) unstable

family relationships affected communication 4) poor relationships led to difficulty in communicating about the pregnancy 5) pregnancy was perceived by adolescents as improving relationships and communication 6) communication support for adolescents often comes from people other than parents.

Data related to theme number one, when compared with the low study PAC scores, documents the rationale for the very low perception of communication scores for adolescents related to their fathers. This theme included not knowing their fathers due to the fathers being in prison or out of the home since an early age, fear of talking with fathers because it was felt they would get in trouble or being degraded as a result of his anger.

Data related to theme number two, when compared with the low study PAC scores, documents the rationale for the low perception of communication scores for adolescents related to their mothers. This theme included difficulties with communication related to conflict in the home during the growing up years, feelings of rejection and being shoved away, perceptions that mothers had too many personal needs and were unable to deal with the adolescents problems and needs. Subjects often felt responsible to solve their own problems.

Data related to theme number three, when compared with the low study PAC scores, documents rationale for how unstable family relationships affected communication patterns. Specific situations described included subjects who do not live with parents on a regular basis due to death, parents living out of the country, parents gone to other geographic areas trying to reunite with ex-spouses who were getting out of

prison, abusive or violent relationships, and subjects living with extended family members or various other people due to problems in the parent-child relationship.

Data related to theme number four, when compared with the low study PAC scores, documents rationale about how poor relationships between parents and adolescents led to difficulty with communication related to the pregnancy. Subjects indicated they didn't really wish for parents to have knowledge about things going on in their lives, and especially not negative things. Also, subjects were afraid to tell parents about the pregnancy for various reasons, including the fear that parents would insist on an abortion, or simply because subjects hadn't communicated with parents for some time and weren't sure what the reaction would be.

Data from theme number five, when compared with the low study PAC scores, suggests that the adolescent pregnancy was perceived by adolescents to greatly improve the parent-adolescent relationships and communication patterns. Many subjects indicated that parent-adolescent communication became much more open, parents and subjects had much more in common and treated subjects as if they were their "best friends now." This data suggests a perception by adolescents that most relationships benefited from the pregnancy. Pregnancy was seen to be a blessing by both adolescents and their parents which improved parent-adolescent communication.

Data from theme number six, when compared with the low study PAC scores, describes that communication support for study adolescents often comes from people other than parents. Other people seen to be more important for adolescents related to communication support, other than parents, included a mother-in-law, boyfriends, sisters, grandmothers, aunts, brothers, boyfriend's relatives, and friends. This data

suggests that current communication support is not dependent upon the parent-adolescent relationship, and that other people are often more supportive than are parents, for this sample population.

Research Conclusions

- 1. Based on the comparison between sample PAC scores related to both mothers and fathers and the PAC normed instrument scores, perceptions of communication between these pregnant adolescents and their parents in Banning, California are very poor.**
- 2. The perceptions of communication between these pregnant adolescents and their fathers are much more troubled than the communication between their PAC normed adolescent counterparts related to their fathers.**
- 3. Perceptions of communication between these subjects and their mothers are better than with fathers, but are still considerably lower than their normed PAC counterparts.**
- 4. There is no correlation between PAC communication scores and subjects age.**
- 5. Previous research has suggested that adolescent pregnancy occurs due to poor communication between adolescents and their parents. This research supports poor communication and relationships prior to the pregnancy.**
- 6. Subjects viewed the pregnancy as the initiation of a new and better relationship and increased communication with parents. Having a baby is seen to be an attempt to increase family connectedness and to provide hope for the future among these adolescents.**
- 7. The qualitative research also implies that there is poor communication, poor family**

connectedness, and poor hope for the future among this group of pregnant adolescents.

8. Factors of family interaction, connectedness, and communication need to be encouraged among families, children and adolescents to help decrease the potential for adolescent pregnancy.

This study which looked at demographic variables related to PAC scores, along with the qualitative interview data, has not been included in prior research studies of pregnant adolescents. The relationship between important demographic variables when compared to PAC scores, along with interview data from the pregnant adolescent subjects, have added to and helped to clarify the knowledge base of how these factors influence the adolescent perceptions of parent-adolescent communication and subsequently adolescent pregnancy.

The review of the literature indicated that nursing has not been involved in a major way with research related to pregnant adolescents. Unlike many of the other studies which have been conducted on pregnant adolescents, this study was based on a number of theories including adolescent and family developmental theories, family communication theories, and health-behavior theories. The goal was to identify perceptions and feelings not previously noted in pregnant adolescents. This study has contributed to the basic foundation of knowledge provided about the issue of parent-adolescent communication and adolescent pregnancy from the perspective of pregnant adolescents. The results have provided insights into the communication patterns of parents and adolescents in Banning/Beaumont area of southern California.

Implications for Nursing Practice, Education, and Administration

Nursing has the potential to be leaders in the health care delivery system in the coming century. Historically, nursing has been involved in women's reproductive health and prenatal care and has contributed significantly in increasing the status of the profession in terms of advanced practice roles and nursing research. It is vital for nurses to combine current expertise related to the adolescent pregnancy issue, such as the expert abilities of assessment, planning, intervention, and evaluative processes, adolescent growth and development theory, critical thinking, and the qualitative research approaches being utilized by the profession in many instances, to lead the way in working with adolescent women (Fitzgerald & Wood, 1997).

Nursing Practice. Nurse midwives, clinical nurse specialists, and nurse practitioners in any clinical setting are specifically positioned to play a unique advocacy role in helping to combat adolescent pregnancy. These practitioners can provide education and counseling regarding family planning issues, teach parenting and communication skills to families, work individually on a preventive basis with teens and their families as mentors and role models, and become involved in the design and implementation of pregnancy prevention programs. This involvement could help in the provision of hope to adolescents toward their personal future, which may impact the adolescent pregnancy rate (Cockney, 1997).

Nursing Education. Within the changing social context, it is important for nursing educators to recognize new issues which necessitate nursing intervention. Nursing education is often criticized for graduating students unprepared for the future and

maintaining curricula which is non-applicable to reality based practice. Nurse educators need to be on the forefront of questioning historical models of curriculum development and initiate new strategies in the effort to integrate theory and practice, using teaching-learning strategies which are based on current research which will move nurses from beginning practitioners to expert clinicians (Billings, 1991). Theoretical bases for working with adolescents, both pregnant and non-pregnant, identify an important thread for maternal-child and other nursing curricula.

Nursing Administration. Nursing administrators who monitor the care of adolescents need to work to ensure that staff are trained to assess and intervene with families who are experiencing problems with functioning, connectedness, or communication. Adolescents and their families who are currently experiencing a pregnancy need special assessment, assistance, and education during this time. On the national level, nursing administrators can support legislative attempts to deal with the issue of adolescent pregnancy. Nursing can become more involved in the Public Health Care arena, in the promotion of effective model programs, as well as public policy formation and implementation.

Recommendations for Further Research

1. It is recommended that this study be replicated with a larger sample of pregnant adolescents including subjects with a wider range of ethnic and socioeconomic diversity, and from different geographic regions. The study could incorporate a comparison group of non-pregnant adolescents to provide a correlation with the pregnant adolescents. This data could more effectively be generalized to other groups.

2. **Parent-adolescent communication could be looked at from the perception of both mothers and fathers, with subscales already identified within the PAC normed instrument. A new communication tool could be developed which may more accurately measure adolescent perception of parent-adolescent communication among pregnant adolescent women.**
3. **Qualitative research could include interviews with adolescents and their parents in order to further explore perceptions of openness and problems in family communication. Repetitive life patterns identified within varying generations could be evaluated with integration of higher educational levels and specific strategies to increase adolescent hope for the future.**
4. **More complex, experimentally designed studies are needed to determine specific intervention strategies appropriate for nursing to use in working to prevent adolescent pregnancy.**
5. **More qualitative research in this area would help in seeking the realities of this issue from the perspective of the pregnant adolescents subjects themselves.**

The incidence of adolescent pregnancy has not been demonstrated to have decreased significantly over the past three decades in the United States. Effective interventions are needed which will result in a decrease in the adolescent pregnancy rate and work to increase effective functioning, connectedness, and communication among the families in our society.

References

- Alan Guttmacher Institute (AGI) (1994). Sex and America's teenagers.
New York : Alan Guttmacher Institute.
- Ajzen, I. (1989). Attitude structure and behavior. In A.R. Pratkanis, S.J. Breckler, & A.G. Greenwald (Eds.) Attitude structure and function. 241-274. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ajzen, I. & Fishbein, M.(1975). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bandura, A.(1986). Social foundations of thought and action, A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Becker, M.H. (1974). The health belief model and personal health behavior. Thorofare, N.J.: Charles B. Slack.
- Belenky, M.F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.A. (1986). Women's ways of knowing: The development of self, voice, and mind. USA (no city, state): Basic Books.
- Billings, D. (1991). Nursing education. In Issues and trends in nursing, G. Deloughery, (Ed). St. Louis: Mosby Yearbook.
- Boyer, D., & Fine, D. (1992). Sexual abuse as a factor in adolescent pregnancy and child maltreatment. Family Planning Perspectives, 244-11, 19.

Brindis, C. (1990). Reducing adolescent pregnancy: the next steps for program, research and policy. Family Life Educator, Santa Cruz, CA; National Family Life Education Network: Network Publications, 9(1).

Burr, W., Day, R., & Bahr, K. (1993). Family Science. Pacific Grove, CA: Brooks/Cole.

California Department of Health Services (1996).

Cates, W. (1991). Teenagers and sexual risk taking: the best of times and the worst of times. Journal of Adolescent Health. 12:84-94.

Cassidy, V.R. (1991). Ethical responsibilities in nursing: Research findings and issues. Journal of Professional Nursing, 7, 112-18.

Chally, P.S. (1993). Nursing ethics. In Professional nursing, concepts and challenges. K.K. Chitty, (Ed.) Philadelphia: W.B. Saunders, Co.

Cobliner, W.G. (1974). Pregnancy in the single adolescent girl: The role of cognitive functions. Journal of Youth and Adolescence, 3, 17-29.

Cockney, C.D. (1997). Preventing teen pregnancy, it's time to stop kidding around. Lifelines. AWHONN, (June), 32-40.

Day, R.D. (1995). Family systems theory. In Research & Theory in Family Science. Day, R.D., Gilbert, K.R., Settles, B.H., & Burr, W.R. (Eds). Pacific Grove, CA: Brooks/Cole.

Donovan, P. (1997). Can statutory rape laws be effective in preventing adolescent pregnancy. Family Planning Perspectives, 29(1).

- Drake, P. (1996). Addressing developmental needs of pregnant adolescents. JOGNN, 25(6), 518-524.
- DuRant, R.H., Seymore, C., Pendergrast, R., & Beckman, R. (1990b). Contraceptive behavior among sexually active Hispanic adolescents. Journal of Adolescent Health Care, 11, 490-496.
- Duvall & Hill (1945). When you marry. New York: Heath.
- Eisen, M., Zellman, G.L., & McAlister, A.L. (1990). Evaluating the impact of a theory-based sexuality and contraceptive education program. Family Planning Perspectives, 22(6), 261-271.
- Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1034.
- Elster, A.B. & Lamb, M.E. (1986). Adolescent fatherhood. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Erikson, E. (1968). Identity, youth, and crisis. New York: WW Norton.
- Erikson, E. (1987). The human life cycle. In S. Schlein (Ed). A way of looking at things: Selected papers from 1930 to 1980, 595-600. New York: WW Norton.
- Federal Family Preservation/Family Support/Teen Pregnancy (1997). Unpublished grant proposal, Banning Unified School District, Banning, CA.
- Fishbein, M., Bandura, A., Triandis, H.C., Kanfer, F.H., Becker, M.H., & Middlestadt, S.E. (1991). Factors influencing behavior and behavior change. Final report to the Theorist's Workshop, Washington, D.C.

Fisher, B.A. (1978). Perspectives on human communication. New York: Macmillan.

Fitzgerald, S.M. & Wood, S.H. (1997). Advanced practice nursing: Back to the future. JOGNN, 26 (1).

Flavell, J.H. (1985). Cognitive development (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Floerchinger-Franks, G. (1996). Factors affecting reproductive decision making by low-income hispanic women: The influence of attitude, social pressure, and perceived behavioral control. Unpublished dissertation, Loma Linda University, School of Public Health.

Forrest, J.D. & Singh, S. (1990). The sexual and reproductive behavior of American women, 1982-1988. Family Planning Perspectives, 22 (5):206-214.

Furstenberg, F.F. Jr. & Herceg-Baron, R., Shea, J., & Webb, D. (1984). Family communication and teenagers' contraceptive use. Family Planning Perspectives, 16:163.

Gilligan, C. (1994) Getting civilized. Fordham Law Review, 8 (1), 19-31.

Gilligan, C. (1996). The centrality of relationship in human development: a puzzle, some evidence, and a theory. In Noam & Fischer (Eds.) Development and vulnerability in close relationships. Lawrence Erlbaum Associates, 237-261.

Gordon, C. (1996). Adolescent decision making: a broadly based theory and its application to the prevention of early pregnancy. Adolescence, 31(123).

Gottman, J. (1979). Marital interaction: Experimental investigations. New York: Academic Press.

Hatcher, R.A., Trussell, J., Stewart, F., Stewart, G.K., Kowal, D., Guest, F., Cates, W., Policar, M.S. (1994). Contraceptive technology. New York: Irvington Publishers, Inc.

Hinkle, D., Wiersma, W., & Jurs, S. (1994). Applied statistics for the Behavioral Sciences, (3rd ed). Boston: Houghton Mifflon Co.

Inhelder, B., & Piaget, J. (1958). The growth of logical thinking from childhood to adolescence. (A. Parsons, trans.) New York: Basic Books.

Jenkins, K. (1990). Inside the family's culture: A communicative-oriented analysis of culture with the family unit. Unpublished dissertation, Brigham Young University.

Kanfer, F.H.& Goldstein, A.P. (1975). Helping people change. Elmsford, NY: Pergamon Press, Inc.

Kantner, J.F. & Zelnik, M. (1972). Sexual experience of young unmarried women in the United States. Family Planning Perspectives, 4, 9-18.

Kaye, J. & Philliber, S. (1995). Comprehensive adolescent pregnancy prevention programs: Are they working? New York: Children's Aid Society.

Kirby, D. (1997). No easy answers: Research findings on programs to reduce teen pregnancy. A research review commissioned by the National Campaign's Task Force on Effective Programs and Research. National Campaign to Prevent Teen Pregnancy. Washington, D.C.: National Campaign to Prevent Teen Pregnancy.

Kirby, D., Resnik, M.D., Downes, B., Kocher, T., Gunderson, P., Pothoff, S., Zelterman, D., & Blum, R.W. (1993). The effects of school-based health clinics in St. Paul upon school-wide birth rates. Family Planning Perspectives, 25 (12), 12-16.

Kirby, D., Waszak, C., & Ziegler, J. (1991). Six school based clinics: Their reproductive health services and impact on sexual behavior. Family Planning Perspectives, 23, 6-16.

Kisker, E.E. (1985). Teenagers talk about sex, pregnancy, and contraception. Family Planning Perspectives, 17 (2).

Ku, L.C., Sonenstein, F.L., & Pleck, J.H. (1993). Factors influencing first intercourse for teenage men. Public Health Reports, 108, 680-694.

Kuhn, D., Langer, J., Kohlberg, L., & Hahn, N.S. (1977). The development of formal operations in logical and moral judgment. Genetic Psychology Monographs, 95, 97-188.

Luker, K. (1991). Dubious conceptions: the controversy over teen pregnancy. American Prospect 5:73-83.

Lundberg, S., & Plotnick, R.D. (1990). Effects of state welfare, abortion, and family planning policies on premarital childbearing among adolescents. Family Planning Perspectives, 22, 246-251.

Magura, S., Kang, S. & Shapiro, J.L. (1994). Outcomes of intensive AIDS education for male adolescent drug users in jail. Journal of Adolescent Health, 15, 457-463.

McCullough & Scherman, A. (1991). Adolescent pregnancy: contributing factors and strategies for prevention. Adolescence, 26, 809.

Mittelmark, M.B., Murray, D.M., Luepker, R.V. (1987). Predicting experimentation with cigarettes: The childhood antecedents of smoking study (CASS). American Journal of Public Health; 77:206-208.

Moore, K.A., Miller, B.C., Gleib, D., Morrison, D.R. (1995). Adolescent sex, contraception and childbearing: A review of recent research. Washington, D.C.: Child Trends.

Moore, K.A., Blumenthal, C., Sugland, B.A., Hyatt, B., Snyder, N., & Morrison, D.R. (1994). State variation in rates of adolescent pregnancy and childbearing. Washington, DC: Child Trends, Inc.

Morgan, C., Chapar, G.N., & Fisher, M. (1995). Psychosocial variables associated with teenage pregnancy. Adolescence, 30 (118), 277.

Mosher, W.D. & Bachrach, C.A. (1996). Understanding U.S. fertility: continuity and change in the national survey of family growth, 1988-1995. Family Planning Perspectives, 28(1).

Muckenfuss, M. (1997, July 20). A parent kills a child: Only questions remain. The San Bernardino Sun.

Newcomer, S.F., & Udry, J.R. (1985). Parent-child communication and adolescent sexual behavior. Family Planning Perspectives, 17 (4).

Olson, D.H., McCubbin, H.I., Barnes, H., Larsen, A.S., Muxen, M., & Wilson, D. (1985). Parent-adolescent communication. In D.H. Olsen et al. (Eds), Family inventories. St. Paul, MN: Family Social Science, University of Minnesota.

Piaget, J., Brown, T.A. & Kaegi, C.E. (Eds. and Trans.) (1981). Intelligence and affectivity: Their relationship during child development. Palo Alto, CA: Annual Reviews, Inc.

Piaget, J. (1952). The origins of intelligence in children. New York: International Universities Press.

Resnick, M.D., Bearman, P.S., Blum, R.W., & Add Health Project Group; Bauman, K.E., Harris, K.M., Jones, J., Tabor, J., Minnesota Analysis Group; Bouhring, T., Sieving, R.E., Shew, M., Ireland, M., Bearinger, L.H., Udry, R. (1997, Sept 10). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. JAMA.

Robbins, C., Kaplan, H.B., & Martin, S.S. (1985). Antecedents of pregnancy among unmarried adolescents. Journal of Marriage and the Family, 47, 567-583.

Rosenfeld, J.A. & Everett, K. (1996). Factors related to planned and unplanned pregnancies. The Journal of Family Practice, 43(2).

Rosenstock, I.M. (1980). Historical origins of the health belief model. In The Health Belief Model and Personal Health Behavior. M. Becker, (Ed.) Englewood Cliffs, NJ: Prentice-Hall, Inc.

Sachs, B. (1985). Contraceptive decision-making in urban, black female adolescents: Its relationship to cognitive development. International Journal of Nursing Studies, 22, 117-126.

Sachs, B. (1986). Reproductive decisions in adolescence. Image: Journal of Nursing Scholarship, 18, 69-72.

Santelli, J.S. & Beilenson, P. (1992). Risk factors for adolescent sexual behavior, fertility and sexually transmitted diseases. Journal of School Health, 62(7).

St. Lawrence, J.S., Jefferson, K.W., Alleyne, E., & Brasfield, T.L. (1995). Comparison of education versus behavioral skills training interventions in lowering sexual HIV risk behavior of substance dependent adolescents. Journal of Consulting and Clinical Psychology, 63(2), 221-237.

Soriano, C.G. (1997, Sept 26-28). Focus on Hope. San Bernardino County Sun: USA Weekend, 20.

Speraw, S. (1987). Adolescents' perceptions of pregnancy, a cross cultural perspective. Western Journal of Nursing Research, (2), 180-202, Sage Publications, Inc.

Singh, S. (1986). Adolescent pregnancy in the United States: An interstate analysis. Family Planning Perspectives, 18(5), 210-220.

Spitz, A.M., Velebil, P., Koonin, L.M., Strauss, L.T., Goodman, K.A., Wingo, P., Wilson, J.B., Morris, L., Marks, J.S. (1996). Pregnancy, abortion, and birth rates among US adolescents--1980, 1985, and 1990. JAMA, 275:13.

Schwarzer, R. & Fuchs, R. (1995). Self-efficacy and health behaviours. In Predicting health behaviour: Research and practice with social cognition models. Conner, M. & Norman, P.(Eds.) Buckingham: Open University Press.

Turner, J.S. & Helms, D.B. (1995). Lifespan development (5th ed.), Orlando, FL: Harcourt Brace & Co.

Urberg, K.A., & Rosen, R.A. (1987). Age differences in adolescent decisionmaking: Pregnancy resolution. Journal of Adolescent Research, 2, 447-454.

Walker, L.O. Parent-infant nursing science: Paradigms, phenomena, methods (1992). Philadelphia: F.A. Davis Co.

Websters 21st Century Dictionary (1991). Nashville: Thomas Nelson, Publishers.

Young, E.W., Jensen, L.C., Olsen, J.A., & Cundick, B.P. (1991). The effects of family structure on the sexual behavior of adolescents. Adolescence, 26, 977-986.

Zelnik, M. & Kantner, J.F. (1979). Reasons for nonuse of contraception by sexually active women aged 15-19. Family Planning Perspectives 11 (5):289-296.

Zimmerman, B.J., Bandura, A. & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. American Educational Research Journal, 29(3), 663-76.

APPENDIX B
AGENCY CONSENT FORMS

June 8, 1998

**To: Committee on the Protection of Human Subjects
University of San Diego**

**Please be advised that Susan Lloyd has obtained permission to conduct her study of
“Adolescent Perceptions of Parent-Adolescent Communication and Adolescent
Pregnancy” with volunteer pregnant participants attending school in our school district
during August 1998 to December 1998.**

Sincerely,

**Gloria Johnston, Ph.D., Superintendent
Banning Unified School District
161 W. Williams
Banning, California 92220**

June 8, 1998

**To: Committee on the Protection of Human Subjects
University of San Diego**

**Please be advised that Susan Lloyd has obtained permission to conduct her study of
“Adolescent Perceptions of Parent-Adolescent Communication and Adolescent
Pregnancy” with volunteer participants attending our clinic during August 1998 to
December 1998.**

Sincerely,

**~~Faith Bolton~~ Davis
Administrator, Family Care Center**



RANCHO PASEO
MEDICAL GROUP

Total Family Care

Debra L. Calvert
Family Practice

Shirley M. ...
Radiology

Frederick J. Lloyd, M.D.
Emergency Medicine
Family Practice

Susan L. ...
Prenatal Education

Donald ...
Ophthalmology

June 8, 1998

**To: Committee on the Protection of Human Subjects
University of San Diego**

**Please be advised that Susan Lloyd has obtained permission to conduct her study of
“Adolescent Perceptions of Parent-Adolescent Communication and Adolescent
Pregnancy” with volunteer participants attending our clinic during August 1998 to
December 1998.**

Sincerely,

**Frederick J. Lloyd, M.D.
Administrator, Rancho Paseo Medical Group**

300 South Highland Springs Avenue, Suite 2-H, Banning, CA 92220
TEL 909 845 4368 FAX 909 845 5189

June 8, 1998

**To: Committee on the Protection of Human Subjects
University of San Diego**

Please be advised that Susan Lloyd has obtained permission to conduct her study of "Adolescent Perceptions of Parent-Adolescent Communication and Adolescent Pregnancy" with volunteer participants attending our hospital for prenatal care during August 1998 to December 1998.

Sincerely,

**Jeung Choo Yoo, M.D.
Executive Director
264 N Highland Springs Ave
Banning, California 92220**

APPENDIX C
PARENT/GUARDIAN INFORMATION LETTER
AND CONSENT FORM

Dear Parents,

I am a nurse interested in finding out what it's like to be pregnant at a young age. I'm doing a research study to find out about these things. The study will help professionals to understand how communication between parents and teens affects teenage pregnancy. I need pregnant girls who are between the ages of 13-19. I would appreciate it if you would give your permission for your teenager to participate in my study.

If you agree to have your teenager participate, she will be asked to fill out questionnaires that take about 20 minutes to complete. These will be completed after a school class or after a prenatal health appointment. After the written questionnaire, your teenager will be asked if there is anything else she would like to say verbally into a tape recorder about how she communicates with her mother and father. Anything she says will be kept a secret, unless by law I have to tell someone. An example of this would be if someone has hurt her physically. This is not a test with right or wrong answers. Your teenager may stop and quit the study at any time without any change in her health care or education. To quit, she may return the questionnaire to the researcher and then continue with her school or health visit schedule.

I realize that this will take up some time. However, your teenager will be giving very important information about how your family communicates and how that has affected her pregnancy, which will be very helpful in working with other teens. If you have any questions please call me at (909) 795-7919. The schools and clinics have already approved this study.

Enclosed is a consent form if you are willing to have your teenager participate. Please sign and return the form to the researcher at the time of your teenager's participation.

Sincerely,

Susan L. Lloyd, DNSC (c)

PARENT/GUARDIAN CONSENT FORM

I give permission for Susan Lloyd, a nurse studying at the University of San Diego, to use information from my teenagers' questionnaires to see if communication between parents and teens affects teenage pregnancy.

I understand that it is the choice of my teenager to participate and she can say no or quit the study at any time without it affecting her health education or prenatal care. The school or clinic has also promised her this.

I understand that it will take about 20 minutes to answer the questions in the questionnaires. If she wants to, my teenager can also talk on a tape recorder to explain any other thoughts or ideas she has about communication between her parents and herself. She can do this after a school class or after a prenatal appointment that she has.

I understand that anything she writes or says will not be told to others, unless by law it has to be. An example of this would be if someone has tried to hurt her physically. If the results of this study are published in a magazine, only information relating to all the teens as a group will be printed, and nothing specific about my teenager personally, will be printed. Neither my teenager or myself will be paid or receive any other special favors for being a part of this study.

I understand that there are no substantial risks involved. If my teenager becomes embarrassed or feels emotionally upset while answering the written questions or while speaking into the tape recorder, I know she can quit at any time. She can also speak to the clinic counselor about what is bothering her. I know that if my teenager refuses to participate or decides to quit answering the questions, this will not effect any medical care or treatment she is receiving.

I have had a chance to ask questions about the study before signing this form by talking directly with Susan Lloyd, the researcher.

I have no other agreement between myself and the researcher other than what is talked about on this consent form.

I, the undersigned, understand the explanations given above and I give my personal permission and consent for my teenager to take part in this research.

Signature of Parent/Guardian Date

Signature of Researcher Date Signature of Witness Date

Location (e.g. Banning High School)

APPENDIX D
SUBJECT INFORMATION LETTER AND CONSENT FORM

Hello,

I am a nurse interested in finding out what it's like to be pregnant at a young age.

I'm doing a research study to find out about these things. The study will help professionals to understand how communication between parents and teens affects teenage pregnancy. I need pregnant girls as volunteers who are between the ages of 13-19. I would appreciate it if you would participate in my study.

If you agree to participate, you will be asked to fill out questionnaires that take about 20 minutes to complete. These will be completed after a school class or after your prenatal health appointment. After the written questionnaires, you will be asked if there is anything else you would like to say verbally, into a tape recorder, about how you communicate with your father and mother. Anything you tell me will be kept a secret, unless by law I have to tell someone. An example of this would be if someone has hurt you physically. This is not a test with right or wrong answers. You may stop and quit the study at any time without any change in your health care or education. To quit, you may return the questionnaire to the researcher and then continue with your school or health visit schedule.

I realize that this will take up some of your time. However, you will be giving very important information about how your family communicates and how that has affected your pregnancy, which will be very helpful in working with other teens just like you. If you have any questions please call me at (909) 795-7919. The schools and clinics have already approved this study.

Enclosed is a consent form if you are willing to participate. Please sign and return the form to the researcher at the time of your participation.

Sincerely,

Susan L. Lloyd, DNSC (c)

SUBJECT CONSENT FORM

I give permission for Susan Lloyd, a nurse studying at the University of San Diego, to use information from my questionnaires to see if communication between parents and teens affects teenage pregnancy.

I understand that it is my choice to participate and I can say no or quit the study at any time without it affecting my health education or prenatal care. The school or clinic has also promised this.

I understand that it will take about 20 minutes to answer the questions in the questionnaires. If I want to I can also talk on a tape recorder to explain any other thoughts or ideas I have about communication between me and my parents. I can do this after a school class or after a prenatal appointment that I have.

I understand that anything I write or say will not be told to others, unless by law it has to be. An example of this would be if someone has tried to hurt me physically. If the results of this study are published in a magazine, only information relating to all the teens will be printed, and nothing specific about me personally will be printed. I will not be paid or receive any other special favors for being a part of this study.

I understand that there are no substantial risks to being in the study. If I feel any embarrassment or have any feelings of being emotionally upset while I am answering the written questions or speaking into the tape recorder, I know I can quit at any time. I can also speak to the clinic counselor about what is bothering me. I know that if I refuse to participate or decide to quit answering the questions, this will not effect any medical care or treatment I am receiving.

I have had a chance to ask questions about the study before signing this form by talking directly with Susan Lloyd, the researcher.

I have no other agreement between myself and the researcher other than what is talked about on this consent form.

I, the undersigned, understand the explanations given above and I give my personal permission and consent to take part in this research.

Signature of Participant Date

Signature of Researcher Date Signature of Witness Date

Location (e.g., Banning High School)

APPENDIX E
DEMOGRAPHIC QUESTIONNAIRE

Information Sheet

Instructions: Please answer each question as it applies to you. You can circle your answer or write it in as the question shows you. Remember this is not a test—there are no right or wrong answers. All information will be kept confidential.

Code Number _____ Today's Date _____

1. Place where you are now:

(please circle the correct location or write it in if it is different)

- a. Banning High School campus
- b. Rancho Paseo Medical Group Clinic
- c. Dr. Yoo's Clinic
- d. Family Care Center
- f. Other _____

2. Ethnicity: (circle the correct one or write it in if it is different)

- a. African-American
- b. Asian
- c. Caucasian
- c. Hispanic
- d. Native American
- e. Other _____

3. Age _____ **Date of Birth** _____

4. Pregnancy status: (circle the right answer)

- b. I am not pregnant now
- b. I am pregnant/I already had a baby

5. Marital Status (circle the right answer)

- a. Married
- b. Single/Engaged
- c. Divorced
- d. Widowed

7. Primary language used at home

8. First language you learned to speak as a child

9. Religion

- a. Catholic
- b. Protestant
- c. No religion
- d. Not sure
- e. Other _____

10. How often do you attend church?

- a. I don't usually attend
- b. I always attend
- c. I attend on holidays
- d. I never attend
- e. I sometimes attend

11. Mother's marital status (circle the right answer)

single/engaged married divorced widowed
deceased other _____ I don't know _____

12. Father's marital status (circle the right answer)

single/engaged married divorced widower
deceased other _____ I don't know _____

13. Family Income (circle the right answer)

- a. Less than \$10,000 per year
- b. \$10,000 to 14,999 per year
- c. \$15,000 to 19,999 per year
- d. \$20,000 to 24,999 per year
- e. \$25,000 to 49,000 per year
- f. More than \$50,000 per year
- g. I don't know
- h. I don't want to say

14. Household Composition (who do you live with) (circle the right answer)

- a. husband or boyfriend
- b. both parents
- c. mother only
- d. father only
- e. alone
- f. a combination of the above
- f. other people _____

15. Use of birth control

- a. I don't use any birth control now
- b. I have used some type of birth control
- c. I have never used birth control

16. If you use birth control, what type do you use?

- a. birth control pill
- b. depro-provera shots
- c. condoms only
- d. rhythm or natural method
- e. norplant
- f. something else (write it in) _____
- g. none

17. How many times have you been pregnant in the past? _____

18. What are your feelings about your most recent pregnancy?

- a. happy
- b. unhappy
- c. I have mixed feelings
- d. I am not sure how I feel

19. Do you feel you are able to take care of this baby?

- a. yes
- b. no
- c. I am not sure

20. I am currently enrolled in some type of health care insurance:

- a. CPSP prenatal program (Medi-Cal)
- b. another type of insurance
- c. I don't know

APPENDIX F
PAC INSTRUMENT—ADOLESCENT AND MOTHER FORM

PARENT-ADOLESCENT COMMUNICATION

Adolescent and Mother Form

HOWARD L. BARNES & DAVID H. OLSON

		RESPONSE CHOICES		
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
___	1.	I can discuss my beliefs with my mother without feeling restrained or embarrassed.		
___	2.	Sometimes I have trouble believing everything my mother tells me.		
___	3.	My mother is always a good listener.		
___	4.	I am sometimes afraid to ask my mother for what I want.		
___	5.	My mother has a tendency to say things to me which would be better left unsaid.		
___	6.	My mother can tell how I'm feeling without asking.		
___	7.	I am very satisfied with how my mother and I talk together.		
___	8.	If I were in trouble, I could tell my mother.		
___	9.	I openly show affection to my mother.		
___	10.	When we are having a problem, I often give my mother the silent treatment.		
___	11.	I am careful about what I say to my mother.		
___	12.	When talking to my mother, I have a tendency to say things that would be better left unsaid.		
___	13.	When I ask questions, I get honest answers from my mother.		
___	14.	My mother tries to understand my point of view.		
___	15.	There are topics I avoid discussing with my mother.		
___	16.	I find it easy to discuss problems with my mother.		
___	17.	It is very easy for me to express all my true feelings to my mother.		
___	18.	My mother nags/bothers me.		
___	19.	My mother insults me when she is angry with me.		
___	20.	I don't think I can tell my mother how I really feel about some things.		

APPENDIX G

PAC INSTRUMENT—ADOLESCENT AND FATHER FORM

PARENT-ADOLESCENT COMMUNICATION

Adolescent and Father Form

HOWARD L. BARNES & DAVID H. OLSON

		<u>RESPONSE CHOICES</u>		
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
_____	1.	I can discuss my beliefs with my father without feeling restrained or embarrassed.		
_____	2.	Sometimes I have trouble believing everything my father tells me.		
_____	3.	My father is always a good listener.		
_____	4.	I am sometimes afraid to ask my father for what I want.		
_____	5.	My father has a tendency to say things to me which would be better left unsaid.		
_____	6.	My father can tell how I'm feeling without asking.		
_____	7.	I am very satisfied with how my father and I talk together.		
_____	8.	If I were in trouble, I could tell my father.		
_____	9.	I openly show affection to my father.		
_____	10.	When we are having a problem, I often give my father the silent treatment.		
_____	11.	I am careful about what I say to my father.		
_____	12.	When talking to my father, I have a tendency to say things that would be better left unsaid.		
_____	13.	When I ask questions, I get honest answers from my father.		
_____	14.	My father tries to understand my point of view.		
_____	15.	There are topics I avoid discussing with my father.		
_____	16.	I find it easy to discuss problems with my father.		
_____	17.	It is very easy for me to express all my true feelings to my father.		
_____	18.	My father nags/bothers me.		
_____	19.	My father insults me when he is angry with me.		
_____	20.	I don't think I can tell my father how I really feel about some things		

APPENDIX H
QUALITATIVE INTERVIEW GUIDE

Qualitative Questions

(Please tape record the reading of each question along with everything the person says in response)

- 1. Is there anything else you would like to tell us about communicating with your parents before you got pregnant?**

- 2. What it is like communicating with your parents now?**

- 3. What would make it easier for you to communicate your feelings with your father?**

- 4. What would make it easier for you to communicate your feelings with your mother?**

- 5. Is there anyone else you know who is easier to communicate your feelings to other than your father and/or mother?**

- 6. What are your plans for the future?**

APPENDIX I
INSTRUMENT CLEARANCE

PERMISSION TO USE FAMILY INVENTORIES

I am pleased to give you permission to use the instruments included in **Family Inventories**. You have my permission to duplicate these materials for your clinical work, teaching, or research project. You can either duplicate the materials directly from the manual or have them retyped for use in a new format. If they are retyped, acknowledgements should be given regarding the name of the instrument, developers' names, and the University of Minnesota.

If you are planning to use **FILE, A-FILE, and F-COPES**, you need to obtain separate permission from **Dr. Hamilton McCubbin**. His address is 1300 Linden Drive, University of Wisconsin, Madison, WI 53706.

Separate permission is also required to use the **ENRICH** inventory in either clinical work or research. This is because the inventory is computer scored and is distributed through the **PREPARE/ENRICH** office. Contact **Dr. David Olson** at **PREPARE/ENRICH, P.O. Box 190, Minneapolis, MN 55458**.

In exchange for providing this permission, we would appreciate a copy of any papers, thesis, or reports that you complete using these inventories. This will help us in staying abreast of the most recent development and research with these scales. Thank you for your cooperation.

In closing, I hope you find the **Family Inventories** of value in your work with couples and families. I would appreciate feedback regarding how these instruments are used and how well they are working for you.

Sincerely

David H. Olson, Ph.D.
Professor