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PSYCHOLOGICAL DIMENSIONS OF  
EFFECTIVE AND INEFFECTIVE CONTRACEPTIVE  
USE IN ADOLESCENT GIRLS

by

JULIE SPAIN

A dissertation submitted to the Graduate  
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This manuscript has been read and accepted for the Graduate Faculty  
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Abstract

PSYCHOLOGICAL DIMENSIONS OF EFFECTIVE AND  
INEFFECTIVE CONTRACEPTIVE  
USE IN ADOLESCENT GIRLS

by

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This dissertation investigated various differences between two groups of adolescent girls attending the Teen Clinic of a Family Planning Program. Both groups expressed intentions to prevent pregnancy but were distinguished by their contraceptive use patterns: The "Effective Users" (N=10) consistently utilized contraception; the "Ineffective Users" (N=11) were sporadic and ineffective in their use of contraception and had either been pregnant or were at high-risk for pregnancy. The subjects were all between 14 and 18 years of age and both groups included White, Black and Puerto Rican girls.

Three sources of data were used to measure the four hypotheses. The first was 11 TAT cards, scored for three measures -- Coping Mechanism, Transcendence Index, and Procreational Motives. The second was a structured clinical interview with open ended questions developed and pre-tested in a Pilot Study for this research. The third, was three sets of forced choice questions revised from previous research in the field during the pilot research. The TAT's and interviews were all scored by two coders.

The two groups differed at statistically significant levels on 8 of the 11 measures reflecting four areas of difference between the effective and ineffective contraceptive users. First, the effective users had a greater sense of "inner control" than the ineffective users. Inner control included a greater recognition of and awareness of either internal states or external environmental situations and evidence of attempts to respond to these; an internalized ability to imagine and produce fantasy material; a tendency to speak of one's self as making decisions or choices out of an awareness of personal needs and external reality; and the belief that the individual rather than God or Fate determines what happens to one in life. Second, the effective users had more of a future and planning orientation. They more frequently expressed specific goals and wishes for the future and specifically articulated plans and steps which logically linked their future goals with present

circumstances. Third, the effective users had a more internal and positive orientation toward sex than the ineffective users. "Positive Sex Orientation" included open acknowledgement and awareness of sexual activity which was experienced with relatively little guilt and embarrassment; participation in sexual intercourse out of a sense of personal choice and in response to personal needs and desires; and an enjoyment of both the physical and emotional aspects of the sexual experience. Fourth, the effective users had less involvement in a peer culture with the norm of adolescent procreation in conjunction with less identification with peer procreation, so that the effective users who had friends where procreation was the norm, were less identified with these friends and were more differentiated from them than were the ineffective users.

There was no statistically significant difference between the two groups in expression of jealousy of peers with children and expression of wishes for pregnancy and/or children or in projected images of babies and pregnancy on the TAT. There was also no difference between the groups on one measure (forced choice questions) of future and planning orientation.

The findings suggest that if family planning counselors were taught to conceptualize the material shared in the standard family planning medical and social interview, elaborate assessment techniques to

predict high risk would not be necessary. Treatment intervention approaches could also emerge from conceptualizing this clinical material.

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## Chapter I

## INTRODUCTION AND LITERATURE REVIEW

It cannot be denied that contraceptive measures become a necessity in married life at some time or other, and theoretically it would be one of the greatest triumphs of mankind, one of the most tangible liberations from the bondage of nature to which we are subject, were it possible to raise the responsible act of procreation to the level of a voluntary and intentional act, and to free it from its entanglement with an indispensable satisfaction of a natural desire. (Freud, 1898)

One of the distinguishing features of modern life is our increased ability to separate sex from procreation. In traditional societies, conception is largely an uncontrolled, fateful concomitant of the expression of sexual desires. There, questions of whether or not to have children, how many, and when are less common. In our society, on the other hand, widespread knowledge of contraception raises these and other issues. Many studies (Hill, Stycos, & Back, 1959; Rainwater, 1965; Ryder & Westoff, 1965; U. S. Bureau of the Census, 1973) show that most men and women have a definite idea about the number of children they want and even when they want to have them; and many adolescent

girls do not want children at the time they become pregnant (Presser, 1974). However, the ability to act on these desires, or in Freud's words -- to act intentionally -- seems to be partially determined by people's subjective beliefs about their capacity to control their destinies, rather than the objective facts of this possibility.

The availability of options for controlling life circumstances traditionally less controllable, and the change in adolescent sexual mores creating new sexual options, requires an adjustment in people's attitudes and behavior. Many cultures and age groups are therefore in a transitional stage where changes in family size norms and sexual mores have not been followed by other attitudinal, emotional and behavioral changes.

The gap between increased sexual activity and effective contraceptive use in adolescents has resulted in pregnancies for 10% of U. S. female teenagers. A recent study (The Alan Guttmacher Institute, 1976) estimated that 11 million teens (aged 15-19), more than half of the teenage population in the United States, have had sexual intercourse; of these, approximately 7 million are young men and 4 million young women. A national study (Zelnick & Kantner, 1972) reported that in the early 70s less than 20% of never married sexually active teenagers had consistently used contraception. By 1975, one million teens were enrolled in family planning clinics and half of the sexually active teens

had seen either a private physician or attended a family planning clinic.

However, Jaffe and Dryfoos (1976) pointed out:

The indicator is a limited one; it does not, for example, convey any information about how long these women continue to attend a clinic, see a doctor or use the methods they choose, and about the effectiveness with which they use the methods.  
(p. 170)

This gap between sexual activity and effective contraceptive use results in one million 15-19 year olds and 30,000 girls younger than 15 becoming pregnant annually (The Alan Guttmacher Institute, 1976; Evans, Selstad, & Welcher, 1976; Jaffe & Dryfoos, 1976). These trends are not likely to reverse themselves naturally as the number of women of reproductive age in the United States increases by an additional 12% by 1980 (NCHS, 1974).

Teenage pregnancy is problematical to the extent that it reflects adolescents' difficulty exerting control over their lives as demonstrated in the "unwantedness" statistics and to the extent that it carries health risks and emotional problems. The findings of a New York survey (Presser, 1974) showed that adolescent pregnancy was closely associated with unplanned and unwanted children. The survey of 408 women, aged 15-29, found that first births of women in the 15-19 age group were less frequently planned than those for women in the 20-23 and 24-29 age groups. While more than 3 in 10 and 7 in 10 of the births to women aged

20-23 and 24-29, respectively were reported planned, fewer than 2 in 10 of the teenage births were reported planned. Moreover, nearly 50% of the teens as compared to 18% of the oldest group, viewed the child as unwanted. In Presser's words: "This is a remarkably high proportion, considering that women can be expected to rationalize a birth as wanted after it has occurred, even if the birth was unintended" (p. 13). Kantner and Zelnick (1973) reported a similar finding -- among a group of teens who did not marry prior to pregnancy outcome, only 20% reported the pregnancies as intended. Recent national studies (The Alan Guttmacher Institute, 1976) reported that 66% of all adolescent pregnancies were unintended and 50% of the births unintended.

Abortion is another indication of unwantedness. Yearly studies by DHEW's Center for Disease Control estimated that 33% of all abortions were performed on women under 20 years of age; and another more conservative figure from 1972 was still as high as 25% (Planned Parenthood Association of America, 1972). The most recent statistics (The Alan Guttmacher Institute, 1976) reported that 27% of the pregnancies of 15-19 year olds and 45% of pregnancies of girls younger than 15 were terminated by induced abortion. The abortion rates may still be rising, as between 1972 and 1975 the abortion rate rose from 19 to 32 abortions per 1000 women aged 15-19 (Digest, 1976).

Unwantedness forbodes emotional difficulties for the mother and child. One study (Meir, 1973) reported that state hospital populations had a disproportionate number of mothers of large families. These were frequently the parents of children requiring foster placement and other specialized state services. A Czechoslovakian study (Dytrych, Matejck, Schiller, David, & Friedman, 1975) of children of women denied abortion and a matched control group, found a higher incidence of illness and hospitalization, somewhat worse integration in the peer group, and slightly poorer school marks and performance despite the same level of intelligence, in the children at age nine of the mothers' denied abortion as compared to the control group. Another facet of the mental health consequences was reported by Kantner and Zelnick in a rather startling finding: teenage mothers had a suicide rate 10 times higher than that of the general population (Lincoln, 1972). Other research (Gabrielson, 1970) has also pointed out that for teenage mothers suicide risk is higher than for non-mothers, though cautioning that there may be a common problem which preceded both the pregnancy and suicide. Child abuse also seems to be more frequent in this group (Westoff, 1976).

Early teenage pregnancy also carries health risks with a less than favorable outcome of pregnancy likely if the mother is younger than 16 (Nortman, 1974). For example, the infant of a teenage mother

is two to three times more likely to die in the first year than babies born to women in their twenties. Children born to mothers under 20 have an increased risk of congenital defects, including clubfoot, intracranial or spinal injury, breathing difficulties and epilepsy (Newcombe & Tarendale, 1964). Although the research on intelligence is controversial, it is worth noting the findings of one study (Pasamanick & Lilienfeld, 1956), which reported that the risk of mental retardation was quite high for children born to mothers under 20. The increased risk of prematurity was considered to be one of the most important medical risks of teenage pregnancy (Mencken, 1972).

### Historical Perspective

The farther a notion reaches back into primitive times for its origin, the more universal must be its extent, and its power in history is rooted in this universality.

(Lippert, *Kulturgeschichte*.  
Quoted by Sumner & Keller,  
*The Science of Society*, ii,  
1465-1466.)

Himes, in introducing Medical History of Contraception (1936) with the quote from Lippert, implicitly suggested that the historical roots of contraception points to the universality of the issues involved

in the limitation of procreation. This section will review some of these historical roots, beginning with a brief discussion of several current issues as a way of suggesting that the historical expression of what is presently referred to as "complex" may be related to the issue of universality.

Virtually all researchers in the field of fertility and contraceptive behavior have stressed the complexity of their undertaking. Those within the psychoanalytic tradition referred to unplanned pregnancy and resistance to contraception as "overdetermined." Others focused on the complicated interaction between different kinds or levels of variables (e.g., Content Variables: attitudes towards sex, contraception, procreation, abortion; Process Variables: ego style; and, Moderator Variables: developmental stage, contraceptive method requirements. [in Miller, 1972, 1973, 1975]). Contraceptive attitudes and behavior do not have neat boundaries, but touch on many areas of human life.

The notion of conception prevention is not new. In "Genesis" (8), Onan in going to his brother's wife practiced coitus interruptus: "And Onan knew that the seed should not be his; and it came to pass when he went in unto his brother's wife; that he spilled it on the ground, lest that he should give seed to his brother" (Holy Scriptures, p. 47). Plato and Aristotle favored population control, with Plato wanting to limit

the ages permissible for procreation (e.g., 30-35 for males; 20-40 for females). In Historia Animalium, written during the 4th century B.C., Aristotle described contraceptive methods: "'by annoint(ing) that part of the womb on which the seed falls with oil of cedar, or with ointment of lead or with frankincense, comminleg with olive oil'" (Himes, 1936, p. 80). Soranus (93-138 A.D.), a great Roman obstetrician, recommended "atokion," "a remedy which prevents conception," as a replacement for "phthorion," or abortion (Himes, 1936; Jacobi, 1926). Although Soranus described some ineffective methods, many of his techniques were based on scientific and rational principles similar to those underlying modern methods. Among them were vaginal plugs, pessaries, and various fruits such as pomegranates which are acidic. The Greeks also had access to contraceptive information. Aetios, a Greek physician of the 6th century A.D., made recommendations similar to Soranus' in Book 16 of his medical encyclopedia, On Medicine in Sixteen Books or Discourses (Himes, 1936).

According to popular history, the modern movement in birth control began with Malthus' Essay on the Principle of Population (1798). However, it was not until Francis Place (1822) described specific methods, that information on birth control became widely available to an English reading population. In Illustrations and Proofs of the Principle of Population (1830), Place advocated birth control as a

replacement for Malthus' remedy of "moral restraint." Place looked to his personal experience and that of others he knew well, as the basis for rejecting Malthus' prescription. He wrote, in a letter to Ensor: "'moral restraint which has served so well in the instance of you and I -- and Mill, and Wakefield, mustering among us no less I believe than 36 children -- rare fellows we to teach moral restraint'" (Himes, 1936, p. 10). His impact was felt not so much through his book but through his contraceptive handbills (1822), widely distributed to the working class in London and the industrial districts of the North. These handbills, supported and distributed by John Stuart Mill, created political and social turmoil and were eventually condemned as "diabolical" (Medawar & Pyke, 1971). In America, Robert Dale Owen and Dr. Charles Knowlton played a role similar to Place in England, with Owen's Moral Physiology (1830) and Knowlton's Fruits of Philosophy (1832) both receiving wide circulation (Himes, 1936; Kennedy, 1970; Sanger, 1938).

Anti-contraceptive feelings have a long history, as well, with the "Old Testament" frequently cited as early evidence: "And the thing which he [Onan] did displeased the LORD; wherefore he slew him also" (Holy Scriptures, Genesis 38, p. 47). Catholic theologians subscribed to the interpretation that Onan was slain for practicing coitus interruptus. In fact, the Rabbis claimed that Er also died for

practicing withdrawal, calling it a mortal sin (Himes, 1936). An alternative interpretation linked Onan's death with his violation of the law of levirate (i. e., man must provide his deceased brother's wife with offspring) (Himes, 1936; Taylor, 1970). This was the view of the Catholic writer, Canon A. de Smet in Betrothment and Marriage (1923): "From the text and context, however, it would seem that the blame of the sacred writer applies directly and formally to the wrongful frustration of the law of levirate, intended by Onan, rather than to the spilling of his seed" (p. 165).

Biblical injunction against contraception derived from the value placed on fertility: "Be fruitful, and multiply, and replenish the earth" (Holy Scriptures, Genesis 1, p. 4). St. Thomas Aquinas, whose 13th century writings have persisted as Church doctrine, made the injunction even more explicit. In Summa Theologica he wrote:

In so far as the generation of offspring is impeded, it is a vice against nature which happens in every carnal act from which generation cannot follow.  
(Himes, 1936, p. 167)

Traditional attitudes condemning birth control also arose from the belief that methods to prevent conception and illicit sexual activities went hand in hand. During the 4th century, St. Jerome (Heironymous) wrote about the immorality of girls and widows, commenting on their drinking of potions to prevent conception (Himes, 1936). In the early 20th century,

this belief formed the basis of anti-contraceptive campaigns whose proponents argued that preventing the spread of contraception would reinforce young girls' fear of pregnancy and thus prevent the spread of "immorality" (Robinson, 1926). Puritanical notions about sex provided other justification for the anti-contraceptive movement, its proponents arguing that birth control led to sexual excesses even in married life (Robinson, 1926).

The early part of the 20th century saw an increase in propoganda, societies, and conferences advocating and condemning contraceptive use. Robinson, for example, created the "Critic and Guide," the first American Journal advocating "the rational limitation of offspring," and demanding "the abrogation of the laws against imparting information about the prevention of contraception" (1926, p. 175). His book, Birth Control or the Limitation of Offspring, which appeared in 26 editions between 1916 and 1927, was largely a polemic statement which implicitly sought to answer the question commonly put by members of this movement as: What maintains the State in its anti-contraceptive policies?

Flugel (1934) brought the psychoanalytic tradition to this ongoing controversy, and initiated psychological inquiry by raising the question in intrapsychic terms: What in man, the individual person, resists contraceptive practices?

## Review of the Literature

### Psychoanalytic Inquiries

Flugel's (1934) inquiry set a trend that many have followed. With the modern era came the attitude that it is the failure to use contraception that needs understanding. And for that, the trend has increasingly been to look to the unconscious, rather than accept what Flugel called rationalizations by those who opposed "neo-malthusianism." Flugel attributed this opposition, first to the humiliation man suffered in recognizing that human life is subject to the same biological conditions as animals. In other words, he viewed contraception as a potential blow to human narcissism. Second, he saw contraception as facing man with the necessity for planning and forethought, undermining the "childlike attitude" that the "welfare of man is in the hands of a beneficent deity, whose constant vigilance relieves the human race of . . ." (p. 13). Flugel described a third source of opposition in Oedipal conflicts and sibling rivalry. The hostility generated there enabled people to blame others for over-population, rather than taking the responsibility themselves. A fourth motive was connected to man's "gregarious and socialization" impulses, with over-population representative of a strong "fatherland" and acting as an enhancement to the individual's ego. He further described two ways in which sexual feelings interfered with

contraceptive use, concepts which persist in more recent research. Contraception was described as symbolically threatening man's potency through its reduction of potential reproduction. And for individuals with masochistic needs, Flugel believed contraception removed the "natural" punishment or consequences of sexual intercourse. His concluding formulation posed an alliance between the id and contraception, with a revolt by the ego against the superego, parents and family which represented anti-contraceptive tendencies.

The gap between Flugel's data, taken from public controversy and his interpretation, based on abstracted interpretations of the private and hidden aspects of man's emotional life narrowed in subsequent studies which used the clinical method within a psychoanalytic framework. The legal-social climate of the late forties and early fifties had its influence in defining what problem was to be researched. The general unavailability of birth control to the unmarried adolescent population made the question of resistance or nonuse relatively meaningless, raising instead issues about the predeterminants of out-of-wedlock pregnancy. While this thesis is not directly addressed to the Why of adolescent sexual intercourse, the findings of early investigations are closely related to more recent research where the climate is one of relative contraceptive acceptability and accessibility.

Studies within the psychoanalytic tradition all had in common the belief that out-of-wedlock pregnancy had specific developmental meanings and was determined by early experiences. That is, pregnancy was viewed as reflecting unconscious motivation for childbearing and not as an accidental by-product of sexual intercourse.

Bernard's research (1944) with ten unmarried pregnant adolescent girls distinguished two subgroups: the first showed "sexual deviations" besides "illegitimacy"; and the second, limited their "violation of sexual mores" to the experiences leading to the pregnancy. The family backgrounds of the former group were the most socially depressed and evidenced open expression of aggression, gross neglect and disrupted family ties. Beyond these differences, a similar causal picture emerged where inadequate paternal care and early emotional malnourishment seemed related to impaired ego development, distorted and conflicted sex role identifications, and low self-esteem. In addition to these "predisposing causes" (i. e., a vague conceptual term indicating less specificity than the next order of causes labeled "precipitating"), Bernard identified as "precipitating causes" a family drama in which the oedipal ambivalence of adolescence was intensified and acted out in a seductive flirtation between father and daughter and open rivalry between mother and daughter. Bernard distinguished between adolescents with an out-of-wedlock pregnancy and other mal-

adjustments; in the former there was a greater tendency toward acting out sexual fantasies. Like earlier researchers (Clothier, 1943; Kasanin & Handschin, 1941), Bernard was cautious to point out that adolescent out-of-wedlock pregnancy could not be neatly reduced to particular well-delineated causes but was always "overdetermined."

The majority of clinical studies within this tradition were similar to Bernard's in their focus on the meaning and possible causes of the pregnancy rather than on contraceptive behavior. A review of them is important because they constitute a major trend in the field, as well as the basis for more empirical large scale research on contraceptive use patterns. It should be noted, however, that the populations described were observed after conception (e.g., during the course of pregnancy, prior to or following an abortion, or after childbirth). These findings may not provide the "best" predictions of "high risk" groups, as pregnancy itself would seem to affect the personality and may intensify or highlight particular areas of conflict.

The interpretation of the clinical studies within this tradition raises theoretical and methodological questions as well. An assumption of pathology and/or deviancy underlies much of this work. The line between theoretical orientation and methodology remains vague. Did the psychoanalytic framework in itself generate the interpretation of pathology or were these studies focusing on a subsample of a larger

pregnant population, or was pregnancy in all adolescents pathological? Kovor (1968) made the point that female delinquency legally defined usually involved "sexual deviancy" (p. 69). However, "sexual deviancy" from a psychological perspective is not a simple definition of intrapsychic processes but develops meaning within particular historical, social and cultural contexts. These questions were raised here to provide a perspective on the following studies.

Blos (1969), in elucidating three constellations in adolescent female delinquency, offered the broadest conceptual picture, making more explicit the implicit assumptions in several other studies. He viewed pregnancy in adolescence as a symptom of delinquency: the sexual behavior and resulting pregnancy were evidence of "acting out" intrapsychic conflict. He viewed this group of girls as unsuccessful in dealing with the tasks of normal adolescent development. The predominant task of pre-adolescence was defined as resistance against the regressive pull to the pre-oedipal mother (i. e., active, nurturing, procreating, and omnipotent): a strong ego was required to master this period and move on to the tasks of adolescence. In delinquency, however, the mother of the girls' early years was not necessarily the "good mother." In fact, maternal deprivation was described by Blos as playing a major etiological role in delinquency. It was not the "good mother" that created the strong pull but rather the girls' need

to recreate or repeat the early period in order to make up for or to remedy earlier deficits.

Delinquent behavior, according to Blos, included at least one of the following predicaments:

(a) a losing battle to overcome a maturational arrest; (b) an unsuccessful effort to resolve a conflict; or (c) an abortive effort to master a trauma through acting out; in short, a struggle against total regression. . . . in delinquency an inner conflict is avoided by experiencing it as a conflict between the self and the outer world. The struggle between psychic institutions is sidestepped by maintaining or instigating a struggle between individual and environment instead of changing the self. (1969, p. 101)

The first constellation was characterized by the girls' failure to accomplish a separation from the pre-oedipal mother; she was fixated at the level of the early relationship. Pregnancy was defined by Blos as an attempt to re-establish the mother-child unit "by proxy" (p. 103). The girl pictured in the second constellation had reached the oedipal level but had been unsuccessful in resolving the conflicts of that period. Sexual "acting out" for this girl was viewed as propelled by rage and hostility towards the oedipal mother who had "ruined and degraded the father" (p. 105). The third constellation was characterized by anti-social or a-social behavior rather than by sexual acting out as in the two former cases. "Acting out" has been closely associated with pregnancy by other researchers of relatively large populations (Kane,

Moan, & Bolling, 1974; Meyerowitz & Malev, 1973). However, the value of their observations was limited by the absence of precise terminological definition. Several researchers of small clinical studies illustrated either Blos' first or second constellation.

One girl in Young's (1954) population provided a representative voice:

"I don't know why, but this was something I had to do. I felt as if I had been acting out a dream. It's as if I had been leading up to this all my life and it was something that had to happen before I could be free to go on with my life." (p. 36)

In the two subgroups -- "mother ridden" and "father ridden" -- the young girl was dominated by one of the two parents. In the former, the mothers prevented their children's development beyond the early symbiotic relationship, using the children's dependence to gratify their own needs. Within the parents' relationship the child, as the exclusive possession of the mother, for example, was used in the battle with the child's father. In contrast to Bernard, Young did not view the pregnancy as an "acting out" of the oedipal conflict of adolescence, rather these girls locked in the infantile dependence of the first two years of life, were described as "acting out" their pre-oedipal conflicts as a way of outgrowing them.

Deutsch (1967), like Young and others (Babikian & Goldman, 1971), viewed out-of-wedlock pregnancy as a compulsion grounded in the infant

and childhood years. She described the personality of these girls as an "infantilism" (p. 110), characterized by a narcissistic need to be loved and marked intolerance of frustration. She believed the mothers had difficulty accepting discomfort in their children, interfering with their development of active and necessary defenses. As they reached adolescence the most powerful force in their lives continued to be a pre-oedipal dependency on the mother. The maturational demands of adolescence to break this tie, in combination with the new sexual freedom -- acting as a substitute external authority for the mother, resulted in an "acting out" of the early fantasy of the mother-child unity through their own impregnation.

Another recent study (Schaffer & Pine, 1972) of girls who were seeking abortions or pregnancy counseling was in agreement with this research in describing pregnancy as an expression of the wish to "re-capture the infantile dependent position in a restitutive way" (p. 521). Most of the girls in this research population suffered maternal deprivation and a smaller group became pregnant after the actual loss of their mothers. These authors described the central issue as they saw it in a concise way -- "being mothered versus being a mother": the former representing the arousal of passive longings for the pre-genital mother of infancy and the latter allowing new identifications and the chance to amend the past, begin again through the infant, and in the role of the

mothering one. Schaffer and Pine did not view pregnancy as a symptom of delinquency, rather they conceptualized it in a "positive" manner, as a potential adjunct to an ongoing developmental process.

Schaffer and Pine's observation that some of the girls had lost their mothers prior to conception characterizes other research populations as well. In a population of 52 girls in residence at a maternity home, 48% alluded to the loss of their fathers as a significant event in their lives, and 17% had actually lost their mothers prior to becoming pregnant (Kane et al., 1974). They conceptualized the pregnancies as a severe reaction to the loss of important love objects. Similarly, Loesch and Greenberg (1962) found a significant alteration in the lives of the women they interviewed prior to conception. Most of these changes were in response to important losses -- death of a parent, relative or boyfriend, a threatened separation or the loss of a job.

In summary, the psychoanalytic literature is in agreement in explaining pregnancy as a motivated phenomenon, an "acting out" of either oedipal conflicts of the adolescent period or as a function of earlier fixations on the pre-oedipal mother and thus an "acting out" of infantile dependency needs. With respect to developmental issues, however, two divergent trends have been noted. On the one hand, pregnancy has been viewed as a "regressive" phenomenon, representative of a fixation which inhibited changes arising from having to

grapple with new tasks of adolescence. On the other, pregnancy has been described as a way of getting past early conflicts, a task in itself which then allowed continuing development.

It is difficult to know the extent to which these differences arise from theoretical, methodological, and/or actual population subgroup differences. However, it does seem that at least some of the distinctions reflected real differences within the population. A study within the psychoanalytic tradition (Schaffer & Pine, 1972), for example, identified two subgroups: one for whom pregnancy was a "regressive resolution"; and, one for whom it became a "progressive resolution." In their concluding remarks, Schaffer and Pine pointed to the influence of the environment as another important variable.

While some of them seemed able to use the self-care implicit in arranging an abortion for themselves as an organizing experience and a basis for other forms of self-care, and while others moved strongly toward an (only questionably reversible) infantile attachment to their own mothers, there was a middle group that seemed quite responsive to the influences from their surroundings, whether these exerted a regressive pull or supported progressive development. (p. 533)

A composite clinical picture of these girls also emerged from this set of readings. Disturbances in the early parent-child relationship was most generally characterized by emotional malnourishment, stemming from either the mother's difficulties or a disrupted family situation, or in Deutsch's description by overindulgence (i. e., perhaps

reflecting a population difference -- "analytic" patients). The conflicts of puberty became particularly difficult for them, as they seemed to have deficits in both ego and superego development and a low tolerance for frustration.

### Contrasting Interpretations

Another trend in the literature contrasts with the psychoanalytic research: adolescent out-of-wedlock pregnancy is seen as an accidental, unmotivated consequence of sexual intercourse. In these studies the focus is not on the pregnancy itself but rather on contraceptive behavior. The most typically reported teenage reaction to pregnancy -- "I thought it could never happen to me" -- has appeared in research ranging from clinical observation to large scale nationwide surveys. Reporting on their own patient population and observations of colleagues in gynecological and psychiatric practices, Sandburg and Jacobs (1971) found this phenomenon to be the most important of fourteen reasons for misuse and rejection of contraception, conceptualizing it as a denial of the possibility of pregnancy.

A nationwide survey (Shah, Zelnick, & Kantner, 1975), while partially confirming Sandburg and Jacob's hypothesis, was in itself evidence of the difficulty in distinguishing between what has been called denial of the possibility of pregnancy and what may have been real

informational deficits. In a sample of 1342 sexually experienced never-married young women aged 15-19 (i. e., white-630; black-713), 976 were not using contraception, 80% of the entire group, yet less than 16% actually wanted to become pregnant. Seven out of ten of the girls discounted the likelihood of pregnancy: The whites claimed that it was the time of the month in which they were unlikely to conceive; and the blacks felt that either their young age, the infrequency of sex, or imagined infertility would prevent conception. Similarly, a large survey of 446 college students found the majority arguing -- "I didn't do it very often -- how could I become pregnant!" (Fujita, Wagner, & Pion, 1971). Furstenberg (1971) also found, as the most prevalent reaction to pregnancy -- "I thought it could never happen to me" -- in a population of 337 black unmarried pregnant teens. While the observations of these studies made an important contribution to the literature, the lack of theoretical interpretation limits their usefulness.

Cobliner and colleagues (1974; Cobliner, Shulman, & Romney, 1973) made observations in a population of 211 pregnant single adolescents in a hospital clinic which were similar to those of others outside of the psychoanalytic tradition. However, he looked to pregnancy and contraceptive patterns as they specifically related to issues of adolescent development, posing an alternative view to the psychoanalytic researchers in focusing on cognitive development. He described

pregnancy as an "unanticipated" consequence of sexual activity, offering Josselyn's (1971) description of adolescent sexual experimentation as a "trial run" rather than "acting out" as an alternative way of understanding the same behavior: "much of adolescent conduct that appears now objectionable to the adult community may have the quality of a trial run rather than that of acting out; sexual activity of the unmarried should no longer be labeled as delinquency" (Coblner, 1974, p. 26). The Piagetian concepts of operative and figurative thinking provided a way for Coblner et al. to conceptualize the "paradoxical circumstance" in which teens did nothing to prevent pregnancy and yet "as soon as they become aware of their pregnancy they are galvanized into defensive action" (1973, p. 442).

Operative thinking transposes future situations into the present and transforms reality, so that the imagined future constantly mobilizes in us the needed resources for actively dealing with contingencies that lie far ahead which we conjure up in our minds. (1974, p. 25)

In cybernetic terms, figurative thinking depends on feedback, and operative thinking constructs models of action and subsequently implements it before the situation materializes. (1973, p. 442)

Coblner hypothesized that contraceptive use was predicated on operative thinking, which he believed was not an active function in most adolescents.

### Myths about Contraceptive Practices

Prerequisites to effective contraceptive practices include an awareness that conception prevention is possible, knowledge about effective contraceptive methods, and accessibility. One study (Reichelt & Werley, 1975) showed that in a population of 1,190 teens, age 13-17, 84% had intercourse before attending a family planning teen center and that most of the group were either misinformed or uninformed about methods of contraception. In addition, the study concluded that the teens' knowledge was substantially improved through attendance at one informal rap session. However, the study did not investigate the correlation between this improved knowledge and contraceptive use. Unfortunately, many family planning programs have modeled their services on the hope that this type of data implied a logical and simple relationship between knowledge and practice, when, in fact, many studies have concluded that the relationship between the two is complex.

The myth that family planning failures were caused by a lack of awareness of contraception, was first dispelled by Hill et al. (1959) and Rainwater (1960; 1965), early researchers who isolated patterns beyond the standard demographic characteristics. Among Hill et al.'s out-patient department sample of 3,000 Puerto Ricans, less than 0.5% claimed to be unaware of birth control. While education, age and place of residence were correlated with the number of methods known, the least

informed group knew an average of 2.5 methods and women between the ages of 15 and 19 knew an average of 3.8 methods. Furthermore, most couples had tried each method which they knew, indicating that their awareness was more than casual.

Most well-designed studies have included some form of this variable. In Furstenberg's (1971) population of 337 unmarried black teenagers attending the Sinai Hospital Pre-Natal clinic in Baltimore, only 6% were unable to identify any method of birth control and most of the girls knew two to three methods. In another study (Kane et al., 1974) of 52 predominantly white girls in a residential maternity home, 90% had heard of three or more methods and 83% had information about where to obtain these methods prior to their pregnancies. Kane and Lachenbruch's study (1973) of 99 girls seeking abortions and 33 girls completing the pregnancy showed that 70% of both groups had knowledge of at least two forms of birth control. Fujita et al. (1971) in a study of a college population, concluded that lack of knowledge was not what inhibited the use of contraception. And Coblener (1974) found that within a group of girls who wished to avoid pregnancy (i. e., 73% of a population of 211 single pregnant girls), 91% had a general awareness of birth control and 43% had specific knowledge.

Two studies indicated that while knowledge and accessibility had some relationship to use patterns, they were still not the most signifi-

cant variables in explaining the patterns. Research at the San Francisco Planned Parenthood Clinic examined the differences between three groups of 377 teenagers, comparable in age, ethnicity, socioeconomic status, and religion by upbringing and current status but distinguishable by their family planning behavior: (1) The contraceptive group included girls seeking birth control methods to avoid unwanted pregnancy; (2) The maternity group included pregnant girls participating in a pre-natal program for mothers of out-of-wedlock children; (3) The abortion group included girls receiving abortion referral and counseling (Goldsmith, Gabrielson, Gabrielson, Mathews, & Potts, 1972). The contraceptive group scored higher on both the birth control and general sex knowledge questionnaires than the other two groups, but the differences were not statistically significant. In Shah, Zelnick, and Kantner's (1975) recent study, reasons for nonuse were not lack of knowledge, although in both the black and white subgroups, 3 out of 10 girls felt that non-availability or inaccessibility inhibited their use.

These studies support the general conclusion that knowledge in itself is not a significant inhibiting factor in the use of contraception. At the same time, the "simple" should not be overlooked and continues to be an important empirical question.

## Chapter II

### PURPOSE AND HYPOTHESES

The literature reviewed in Chapter One raises important conceptual and theoretical questions in this research area. Further research with a somewhat different focus, however, is necessary if the gap between theoretical inquiries and programs for intervention is to be narrowed. This research therefore focuses on the girls functioning at the time of the interview as a way of exploring possible differences between girls who utilize contraception effectively and those who are at high risk for pregnancy, and of exploring methods for evaluating and predicting high-risk.

This study is designed to explore factors which appear from previous research to be associated with contraceptive use patterns in adolescent girls who have knowledge and access to medically prescribed birth control methods and who on an overt or conscious level wish to prevent conception. The research focuses on four areas defined by the hypotheses which follow. These four areas reflect several concerns. First, the emphasis is on adolescent functioning at the time of the research, or in the present. This decision stemmed from the research goal to contribute to the effort to develop interventions which are feasible within a family planning clinic situation. Second, the first three

hypotheses reflect general trends and findings in previous family planning research, which is reviewed in the following sections. And the fourth hypothesis is an attempt to integrate psychoanalytic notions related to unconscious motivations for pregnancy with general research on adolescent peer group functioning.

HYPOTHESIS 1: Effective contraceptive users have a greater sense of "inner control" than ineffective users.

"Inner control" is defined and measured by:

1. Coping Mechanisms: Recognition and awareness of either internal states or external environmental situations and evidence of attempts to respond to either as portrayed in stories to the TAT.
2. Transcendence Index: The internalized ability to imagine and produce fantasy material as portrayed in stories to the TAT.
3. Forced choice questions on locus of control: Self-definition about the extent to which internal control over situations is possible.
4. Forced choice questions on locus of control: Attitudes about the source of control as the person or God and fate.
5. Internal-External Control: Portrayal of sense of self as making decisions or choices out of an awareness of personal needs and external reality and not as a victim of circumstance, as scored from interview material.

### Related Research

Flugel (1934), in the work reviewed earlier, pointed to man's childlike attitudes that the "welfare of men is in the hands of a beneficent deity, whose constant vigilance relieves the human race of . . . ." (p. 13), as an unconscious motivation for resisting contraception. The psychoanalytic literature also reviewed earlier, may be broadly interpreted as suggesting the importance of this variable. That is, pregnancy was described as reflecting the adolescent girls' difficulty in separating from the dependent relationship with the mother. Deutsch (1967) also elucidated a dynamic in which these girls became compulsively responsive to "new" external standards of morality. It would seem that either the dependence or strong ties to the early relationship with the mother or its displacement onto the peer group would reflect deficits in an internal sense of control. Several studies investigated some form of this dimension more precisely, using a range of terminology to express the idea that underlying differences in effectiveness of contraceptive use were distinctions between feelings and beliefs the individual had about his ability to bring about desired goals.

Hill et al. (1959) found "passive and fatalistic" attitudes towards one's own life linked with ineffective use. He asked 3,000 ineffective users -- "Which is more important in life, hard work or luck?" Only 30% of the women and 14% of the men felt that work was most important.

In answer to the question of whether it is better to make a sacrifice in life or to resign oneself to one's lot, 66% of the women chose the latter.

An exploratory study (Keller, Sims, & Henry, 1970) of black married couples found that "feelings of efficacy" in the wives was significantly related to contraceptive use. They defined this variable as "the tendency to (and faith in one's capacity to) effectively grapple with one's problems and strive to reach one's goals" (p. 292).

The social learning theorists have addressed themselves to similar issues. Rotter (1966) hypothesized that the process of planning or carrying out of goals was contingent upon the individual's beliefs about whether his behavior, skills or internal dispositions determined what reinforcement he received. A study (MacDonald, 1970) using Rotter's Internal-External Locus of Control Scale found a significant relationship between internal locus of control and effective birth control use among unmarried undergraduate females. Using the same scale, Lundy (1972) also found that contraceptive users were more "internalizing" than nonusers. His population was undergraduate middle class college women. Meyerowitz and Malev (1973), using a very different research design, found external locus of control to be an essential factor in predicting risk for pregnancy in high school age girls. This study had the advantage of being a large scale survey of 50% of the seventh graders in Houston. Each completed a 200+ item psychosocial

attitudinal questionnaire, which produced seven factors in the secondary analysis. The first of these was external locus of control. However, the findings should also be viewed with caution as distinctions between users and nonusers were not based on actual behavior in the population studied, rather on predictions based on demographic data.

HYPOTHESIS 2: Effective contraceptive users have more of a future and planning orientation than ineffective contraceptive users. Future and planning orientation is defined and measured by:

6. Future awareness: Expression of specific goals and wishes for the future in the interview.

Future related to planning: Expression of plans and elaboration of steps which logically link future goals with present circumstances in the interview.

7. Forced choice questions on future and planning: Self-definition of sense of the future and planning for the future.

Related Research:

Rainwater (1960) pointed out that the relationship between planning and contraceptive use was quite complex: "particularly since what one is planning is not really parenthood at all, but non-parenthood. . . . The planning that is relevant to contraception is oriented toward not

being a parent" (p. 53). The family planning process may therefore require a great deal of foresight, as it requires what seems at first to be an unnatural linkage between deliberate action and no result.

The Planned Parenthood Teen study (Goldsmith et al., 1972), reported earlier, found that the girls in the contraception group not only had a fairly clear picture of their educational goals, but placed a great deal of emphasis on their vocational interests. In contrast, the two pregnant groups were ambivalent about whether they would even finish high school. Keller et al. (1970) found that the "tendency to plan ahead" was correlated with patterns of contraceptive use. Cochran, Vincent, Haney, and Michielutte (1973), comparing 166 Southern poverty level blacks, aged 20-39 in an active clinic group, drop-out group and "never-been" group, found the active clinic patients highest in the need for achievement and the need to exert control over their futures. Similarly, Kar (1971) found a significant and positive relationship between contraceptive use, future orientation and level of striving.

Using the Personal Scale Inventory, a 90-item paper and pencil self-report inventory designed for sexual and contraceptive research, Miller (Final Report #NO1 - HD-52804) found that the "Planning and Future Orientation" scale was a significant factor in predicting contraceptive use. Some of his more specific findings were particularly

relevant to this research population. In one sample, planning and future orientation was particularly important for subjects who could not talk with their parents about sex, as well as for subjects who had been sexually active over one year prior to using an effective contraceptive method.

**HYPOTHESIS 3:** Effective contraceptive users have a more internal and positive orientation toward sex than ineffective contraceptive users. Internal and positive orientation toward sex is defined and measured by:

8. **Sexual conflict:** Acknowledgement and awareness of sexual activity which is experienced with relative absence of guilt and embarrassment as portrayed in the interview.

**Sexual motivation:** Participation in sexual intercourse out of a sense of personal choice and in response to internal needs and desires as portrayed in the interview.

**Sexual experience:** Enjoyment of physical and emotional aspects of sexual experience as portrayed in the interview.

### **Related Research**

The relationship between sexual attitudes, feelings and behavior, and contraceptive patterns is complicated -- involving the female, her male partner, and the type of contraceptive method. While a person's

sexuality may be reflective of larger personality issues and interpersonal patterns (Sullivan, 1953), the research literature points to discernable differences between users and nonusers along several dimensions of sexuality.

Girls who were ineffective users in one sample (Schaffer & Pine, 1972) described sex as disgusting, and as mechanical, a response to peer pressure and a way out of loneliness in another sample (Coblner et al., 1973). The stereotypes of the sexually promiscuous, acting out and precocious adolescent-"delinquent" have often muddled this issue. By focusing on several dimensions related to sexuality in one population, Abernathy (1973) clarified the problem and dispelled a common myth. The ineffective users in her sample did tend to be more sexually precocious than control groups. However, they did not like sex, were more likely to answer "false" to -- "I wish my (boyfriend, husband) were more interested in sex," and "true" to -- "sometimes I only pretend to be interested in sex."

The Planned Parenthood study (Goldsmith et al., 1972) showed that knowledge about sex was similar in the three groups, but that discussions about orgasm, masturbation and homosexuality provoked more anxiety in the abortion and pregnant groups than in the contraception group. Lieberman (1964) has suggested that one serious barrier to successful contraceptive use is either the conscious or unconscious

feeling that sex is sinful and pregnancy the necessary punishment. In fact, two in-depth studies (Fujita et al., 1971; Kane & Lachenbruch, 1973) observed a great deal of guilt about sex among the ineffective users in their samples. The girls described contraception as "incriminating evidence" and as indicative of "premeditation."

The guilt associated with contraceptive use, in part, seems to relate back to Biblical notions about procreation. Lidz (1969) described a pattern in which contraceptive use precipitated a decompensation in neurotic adjustments. That is, contraception was viewed as robbing a woman of the functional meanings attached to sex, replacing this procreational purpose with the sensual.

HYPOTHESIS 4: Effective contraceptive users have less of an involvement in and fewer pulls toward procreation than ineffective contraceptive users. Involvement in and pulls toward procreation is defined and measured by:

9. Procreation-TAT: Projected images of babies and pregnancy on TAT cards 2 and 7GF.
10. Personal procreation motives: Jealousy of peers with children and expression of wishes for pregnancy and/or children in the interview.

11. Procreation among peers: Involvement in peer culture with norm of adolescent procreation as communicated in the interview.

Identification with peer procreation: Identification and absence of differentiation from peer culture in which procreation is the norm as communicated in the interview.

### Related Research

Numerous psychologists have discussed the role and influence of the peer group and/or chums during adolescence (Blos, 1962; Deutsch, 1967; Erikson, 1968; GAP, 1968; Kovar, 1968; Pearce & Newton, 1963; Sullivan, 1953). In the family planning field and in more general psychoanalytic writings there has been a great deal written about the nature of procreational motives and their influence on and relationship to family size and family planning behaviors (Benedek, 1959; Bogue, 1967; Flapan, 1969; Hoffman & Wyatt, 1960; Kiser & Welpton, 1958; Rabin, 1965; Rabin & Greene, 1968; Rainwater, 1960, 1965; Wyatt, 1967). The earlier review of the psychoanalytic literature on out-of-wedlock pregnancy touched on some of the hypothesized unconscious motivations for childbearing during adolescence. This area of investigation is an attempt to explore and integrate these two areas previously treated as entirely separate in the literature. That is, the role of social norms on childbearing patterns has been systematically investi-

gated (Hill et al., 1959; Potter & Kantner, 1955; Rainwater, 1965; Ryan, 1952; Stycos, 1958). However, these studies have not focused on the adolescent population. While mention has been made of the role of peer pressure on sexual behavior, there have been no specific accounts of peer procreational motives and the individuals' responses to these.

### Chapter III

## METHODOLOGY

### Subjects

The research sample was selected from participants in a Family Planning Teen Clinic, according to the following criteria: aged 14-18, unmarried, sexually active, and overt intention to prevent conception. Economic (class) criteria were not used, as collecting data on parents' income presented legal difficulties and was not accessible to most of the teens themselves.

The study included 21 clinic patients: one group of 10 in the "effective user" subgroup, and a group of 11 in the "ineffective user" subgroup. The "ineffective user" subgroup included two further subgroups determined by pregnancy history: girls who had never been pregnant and girls who had one pregnancy.

This further subdivision was based on both methodological and theoretical considerations. Simple "effective - ineffective" user distinctions did not represent the reality of teen contraceptive use patterns, and therefore was not representative of the complex patterns found in the clinic population. As has been pointed out in the review of the literature, pregnancy in itself would seem to affect the adolescent girl,

particularly along the dimensions studied here. Therefore, in order to focus on a representative clinic population in which many ineffective users have also been pregnant it made sense to include these two subgroups within the ineffective user population.

A further attempt was made to select teens who represented the general Family Planning Teen Clinic population by including white, black and Puerto Rican girls within each subgroup. In addition, girls were selected who were as similar as possible in relation to their "sexual and contraceptive histories." Friedman (1974) discussed the importance of this:

Subjects ought not to be selected on a random basis, cutting across, for example, all fertile age groups or marital situations because the same factors may pull in opposite directions and confound the interpretation of the findings. (p. 184)

The following data were collected on all patients attending the Teen Clinic during the period of study: age, education, ethnic background, number of pregnancies, number of children, abortions, and contraceptive use patterns.

#### Subject Differentiation: Contraceptive Use Rating

The "Contraceptive History" (Appendix I, p. 141), developed for this study, was used to distinguish effective and ineffective contraceptive users. The history was taken by a registered nurse who had four

years experience in family planning interviewing and counseling. Each history was rated twice along the effectiveness use criteria: by the interviewing nurse and by this researcher.

There was a great deal of variety in the individual sexual and contraceptive histories, as well as the clinic attendance records. Therefore, general guidelines with brief case illustrations from the pilot sample are described below:

#### Effective User Criteria

- Initial visit less than 3 months after first sexual intercourse.
- Initial visit more than 3 months after first sexual intercourse, and effective method from another source used during that time.
- Initial visit more than 3 months after first sexual intercourse, but sexual activity very infrequent.
- Interviewed 6 months after initial visit, continuous use of method since initial visit, except if IUD, in which case greater emphasis to period prior to insertion.

#### Pilot Examples of Effective Users

- Virgin at time of initial visit at which time IUD requested, IUD inserted prior to first sexual intercourse.
- First sexual intercourse 1-1/2 months prior to initial visit. Pills chosen as method and foam and condom requested for remaining cycle before beginning pills.

#### Ineffective User Criteria

- Initial visit more than 3 months after first sexual intercourse, frequent unprotected sexual intercourse.
- Interviewed 6 months after initial visit, ineffective use since initial visit.
- Pregnancy prior to initial visit and contraception not used following pregnancy.
- Pregnancy at initial visit or at time of interview.

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### Pilot Examples of Ineffective Users

- First sexual intercourse 2 years prior to initial visit, sex approximately 2 times per week. No contraception used.
- Clinic patient two years prior to interview. No medical or supply visits for 2 years. Pregnant at the time of the interview.

### Data and Measures

Three sources of data were used for the 11 measures of the hypotheses. In this section, first the TAT will be discussed, as one source of data which is then rated for three measures. Second, the interview will be described, followed by the nine dimensions used to rate it. The third source of data, three sets of forced choice questions are included in the interview, but were scored independently by this researcher as the scoring criteria were objective.

### Thematic Apperception Test: Theoretical Background and Scoring Procedures

Henry (1956) described the link between the TAT as a projective instrument and personality dynamics:

There are two specific features of the personality tendency toward consistency which are of crucial significance for TAT interpretation. These features are: first, a resistance to repeated change, and second, a tendency to reproduce itself. This first tendency is a direct reflection of the development of consistency within the personality and the gradual

reduction over time of the personality to change. As consistency develops, flexibility decreases. With this reduced flexibility, an additional feature appears, the tendency to reaffirm the present consistency. This tendency is the mechanism of projection and may be defined as the inclination to see in all outside reality the values and convictions that are already a part of the personality. Thus the individual interprets reality to conform with the reality he expects, he sees in the outer world (and in himself) only what he wants and is able to see. Further, he responds to that personally defined reality in terms of his own feelings, values, and convictions. . . . This projection outward of the individual's personality is readily seen in behavior. Behavior, including that behavior which is the response to a TAT picture, is thus to be seen as symptomatic of the underlying characteristics of the personality.  
(pp. 7-8)

The TAT has been utilized in research (Keller, 1973; Keller et al., 1970) focusing on variables similar to those in this study. In both studies, psychological resistances to family planning in 20 urban black couples and psychological determinants of family size in 65 Mexican couples, the variables were measured by combined scores of a variety of TAT measures and Sentence Completion Protocols, Interview material, etc. Cards 1, 4, 6BM, 8GF, and 20, utilized by Keller et al. (1970), were included in the pilot study for this research, as well as Cards 5, 7GF, and 9 GF.

Final selection of cards for this research was based on several criteria: first, the ability of the card to discriminate between the user and nonuser population in the pilot population; and second, the known

stimulus properties of the cards to elicit material relevant to adolescent interests and the research variables. This second criterion was based on card descriptions by Bellak (1954), Rapaport, Gill, and Schafer (1968), and another research finding (Witkin, Lewis, Hertzman, Machover, Meissner, Bretnall, & Wapner, 1954) that particular cards (1, 2, 6BM, 6GF, 7GF, 12f) discriminated most among women along the dimension of assertiveness. The final group of measures included Cards: 1, 2, 4, 6BM, 6GF, 7BM, 7GF, 9GF, 13MF and two specially constructed cards, one picturing a pregnant woman sitting on a chair and the other picturing a pregnant woman standing with another woman. Cards 5, 8GF, and 20 used in the pilot study were eliminated and Cards 2, 6GF, and 13MF were added with the two specially constructed cards to the final administration.

#### Interpretation of Adolescent TATs

A study by Henry and Farley (1959) demonstrated the validity of the TAT in understanding adolescent personality. Using Cronbach's (1948) procedure for projective validation, they treated 36 adolescent TAT protocols as "predictions" which were compared with "criterion" data composed of objective test scores, summaries of observations and interviews and Rorschach protocols. In addition to the conclusion that the TAT was a valid and reliable diagnostic instrument when used with

adolescents, they located areas in which TAT prediction was most accurate. The TAT proved to be more efficient in predicting peer group and emotional adjustment than family and mental functioning. They interpreted this finding as particularly reflective of the adolescent period in which:

A great deal of psychic energy is bound up by two processes: (a) the establishing of relationships with the peer group, and, (b) the psychic civil wars of emerging sexuality, developing self concept, and the formalizing of attitudes and values. (1959, p. 7)

They concluded that the areas of peer group and emotional adjustment may be more oriented toward the present and that with adolescents the TAT may tend to reflect more "current conscious and unconscious concerns of the subject than the purely unconscious and deeply repressed sources of the concerns" (p. 21). The TAT, therefore, seemed to be a particularly suitable measure for this study, as the research hypotheses were primarily concerned with adolescent functioning at the time of the interview.

### Scoring Categories and Procedures

The TAT stories were scored by two scorers along three dimensions: Transcendence Index, Coping Mechanisms, and Procreational Motives. Each of these three measures is discussed below. The scoring framework section of each constitutes the scoring manual.

### Transcendence Index: Theoretical Background

Weisskopf (1950) defined the transcendence index of TAT pictures as "the number of comments about his picture which go beyond pure description" (p. 379). While her administration instruction to describe TAT pictures differed from Murray's instruction to tell a story, which was used in this study, other research (Singer, 1971) indicated that the instructions did not have a significant influence on final scores. Research on the transcendence index is reviewed below in order to draw the links between the raw data and the scoring of that data with the transcendence index, on the one hand, and the personality dimension of inner control formulated as a research hypothesis, on the other.

Summarizing the writings of several investigators (Dewey, 1933; Holt, 1915; James, 1890; Washburn, 1930), Singer (1955) proposed that:

. . . conscious thought or fantasy bears some relation to the inhibition of an overt motor response directed toward some sort of gratification. (p. 260)

He similarly looked to the work of Luria (1932), Murphy (1947), Piaget (1932), and Werner (1948), in suggesting that:

. . . thought involves the gradual interiorization of motor response or speech which must be inhibited from overt expression because of social restraints or pressures. (p. 261)

The M response on the Rorschach test was considered to tap these processes:

. . . persons who saw several such M responses on a blot series tended, on the one hand, to be relatively stable or inhibited in motor activity and, on the other hand, rather imaginative, given to considerable inner living, and creativeness or playfulness. (p. 261)

The ability to transcend the objective material or stimuli of the TAT pictures has consistently shown significant correlations with the M response on the Rorschach (Barron, 1953; Hays, Gellerman, & Sloan, 1951; Pickering, 1950; Schumer, 1949; Shatin, 1953; Singer & Herman, 1954; Vernier & Kendig, 1951). In addition, the transcendence index had high loadings on several factors related to one study's inner control dimension (Singer, Wilensky, & McCraven, 1956). The factor called "introspectiveness or introversion" had high loadings on Rorschach M, animal movement responses, movement threshold, TAT transcendence, admission of distress following failure, continuation of a task in compliance with authority, and lack of external interest in ward behavior. Both "Admission of distress following failure," and "Continuation of a task in compliance with authority" seemed related to contraceptive behavior, as well. A second factor with a high loading on the transcendence index was "ambitiousness or need achievement." While inner control as defined here was distinct from need achievement, the dimension of planning, which was relevant to this study was also found to have a high loading on need achievement and therefore is related to transcendence index.

Transcendence Index: Scoring Framework (Manual)

Transcendence index is defined as the number of comments which go beyond pure description. For each of the 11 stories code the transcendence items according to the following categories:

(1) Intracception refers to the ascribing of emotions, desires, thoughts, fantasies, etc., to the figures in the picture.

(2) Temporal transcendence refers to the inclusion of events which occur prior to, or after the event shown on the picture.

(3) Spatial transcendence refers to the inclusion of persons, objects, events, etc., which are outside the field of vision represented by the picture.

(4) Relationship refers to the characterization of figures as related to other figures in the same picture.

(5) Content of speech refers to verbal statements made by pictorial figures.

(6) Evaluation refers to the characterization of figures or objects by a subjective value statement. Evaluations may refer to aesthetic evaluation . . . moral evaluations.

(7) Atmosphere refers to the characterization of the whole picture or part of the picture in terms of the emotional response which it elicits in the observer.

(8) Imperative refers to comments to the effect that a pictorial figure "should," "must," "is supposed to," act, feel, or think in a certain manner.

(9) Symbolism refers to the conscious and explicitly verbalized ascribing of symbolic meaning to the picture.

(10) Emphasis refers to the singling out or stressing of a part of the picture (i.e., "The most important thing in . . .").

(11) Miscellaneous other categories accounts for a small minority of remaining transcendences.

(Weisskopf, 1950, p. 380)

Pilot TATs are presented below with transcendence coding. Two specific problems will be noted in the coding. First, some of the items fall in more than one of the categories. As the most important score is the overall number of transcendent items, the item should be scored in only one category. The decision about which category is not important to this study. However, these items should be starred (\*), to help clarify the source of difference which might then occur between the two scorers. Second, the decision about what unit to code as one comment can be problematical. The general rule is to score a discrete idea as one unit. That is, if part of a sentence, for example, contributes something new and if the preceding part of the sentence or idea could stand alone, then score the second part as another unit.

### Transcendence Scoring Examples

#### Card 1 (Pilot Subject V)

This was a boy whose parents were divorced. He lived with his mother and never saw his father. He always heard how well his father played the violin. He wanted to be like his father so he practiced the violin. He played it well, but he played it behind his mother's back. She broke the violin. He got a letter from his father. His father told him to quit the violin and the boy didn't like that. He still practiced it. He saw his father and showed him how well he did, the father was hurt. The boy didn't like his father after that and quit the violin and never played it again.

#### Intracception: (4)

He wanted to be like his father so he practiced the violin.  
the boy didn't like that.  
the father was hurt.  
The boy didn't like his father after that.

Temporal: (3)

whose parents were divorced  
 She broke the violin.\*  
 and quit the violin and never played it again.

Spatial: (4)

He lived with his mother and never saw his father.  
 He always heard how well his father played the violin.  
 He got a letter from his father.  
 He saw his father and showed him how well he did.

Content of speech: (1)

His father told him to quit

Evaluation: (1)

He played it well

Note: There is a great deal of possible overlap here between the units placed in the temporal and spatial categories.

Card 1 (P.S. IX)

To me he looks like he is going to school, he has a sheet of music. Thinking of whether he should continue, really has a problem -- he doesn't like the idea, his parents want him to. Trying to think of a way of telling his parents he doesn't want to, trying to think. Doesn't look like he likes it. He would tell his parents. Trying to figure out what else. I know what it's like to play the violin. I couldn't stand it, could be he has to practice and dreads the idea.

Intrasection: (2)

he doesn't like the idea  
 I couldn't stand it

Spatial: (1)

like he is going to school

Content of speech: (3)

Trying to think of a way of telling his parents he  
 doesn't want to  
 He would tell his parents  
 I know what it's like

Evaluation: (1)

Doesn't look like he likes it.

Imperative: (2)  
 his parents want him to  
 could be he has to practice

Card 1 (P.S. IV)

What is he holding. Little boy, he came home from school,  
 he had hard homework assignment. Sitting waiting for his  
 parents to get home, thinking what to do. Sat down to see if  
 he could get some information. Probably, he finally got it.

Temporal: (3)  
 he came home from school  
 he had hard homework assignment  
 Probably, he finally got it.

Spatial: (1)  
 his parents to get home

Intracception: (1)  
 thinking what to do

Card 1 (P.S. VII)

Well, this little boy, he's looking at the violin. I have to  
 play this but I don't like it. I wish I could break it. I'm  
 tired of it, might pick it up and play it not because he  
 wants to but because he has to because of his parents.

Intracception: (2)  
 I don't like it.\*  
 I wish I could break it.\*

Temporal: (1)  
 might pick it up and play it

Imperative: (2)  
 I have to play this  
 not because he wants to but because he has to  
 because of his parents.

Card 7BM (P.S. IV)

The father having a talk with his son and telling him how he has to treat a woman. He finally gets through to his son and two months later he got married.

Temporal: (1)

He finally gets through to his son and two months later they get married.

Relationship: (1)

The father having a talk with his son

Content of speech: (1)

telling him how he has to treat a woman

Card 7BM (P.X. IX)

The father and son and he's telling his father about marrying or getting serious with a woman. His eyes, the younger guy, not convinced by father, trying to explain what will happen that's a problem. I can't say anything. Father thinks he should because of grin in his eyes. The husband doesn't know whether to take his advice.

Intrasection: (1)

The husband doesn't know whether to take his advice.

Relationship: (1)

The father and son

Content of speech: (2)

he's telling his father about marrying or getting serious with a woman  
trying to explain what will happen that's a problem

Evaluation: (1)

His eyes, the younger guy, not convinced by father

Imperative: (1)

Father thinks he should because of grin in his eyes.

Coping Mechanisms: Scoring Framework (Manual)

Coping mechanisms is defined as the hero evidencing some recognition of his or her situation in conjunction with some "active"

means of dealing with this situation -- where "active" includes assertive directed behavior and/or thinking and understanding. Coping mechanism is not defined by the outcome. The hero's success or failure in reaching a goal is not being scored. However, if in attempting to resolve a difficulty, the hero's coping is blatantly self-destructive, reflecting no communication, understanding or empathy of the self or the other, then the activity will not be considered a coping mechanism.

#### Identifying Hero-Figure

A first step in scoring for coping mechanisms is identifying the hero-figure. The hero-figure is defined as the character in the story with whom the subject seems to identify -- the character through whom the subject is, in effect, expressing what happens to her, what she feels, does and sees in her world.

The process of determining the hero-figure is important to the scoring, as it reveals information related to the specific categories to be coded. Henry (1956) described the hero-figure: "Such a person is normally the one most involved in the plot, the one about whom the writer tells us the most, and toward whose goals the outcome is directed" (p. 77). However, he also pointed out that the patterns of identification as reflected in the clarity, strength, elaboration, etc.

of the hero-figure should not be identified merely by completeness of elaboration, or the figure whose goals are met: rather, age and sex should be seriously considered. In fact Murray (1943) defined the hero-figure as the character who is most like the subject in age, sex, social status, role, etc.

Age: When the picture contains two figures of clearly different ages, the younger figure is likely to be the hero-figure. (Cards 2; 7GF; 7BM)

Sex: When the picture contains male and female figures, the female figure is likely to be the hero-figure. (Cards 4; 6GF; 13MF)

Several cards (6BM; 9GF) picture figures which do not provide the basis for these general guidelines. When it is not possible to identify such a figure, then the major themes, interactions, etc. should provide the focus for scoring. Identifying a hero-figure as distinct from other figures, may also be unnecessary in some stories.

Card 9GF (P.S. V)

This girl sees herself as two people. What she is . . . She begins changing this way.

Card 6BM (P.S. V)

Many times there's a generation gap, but a lot of times . . . These two men . . .

Coping Mechanisms Scoring Examples

The five categories described below do not include all possible story situations or coding choices. Rather, they offer general themes

from the pilot sample, and thus provide specific guidelines for coding similar stories and general guidelines for making coding distinctions in stories which are not represented through example. None of the five categories is discrete. Taken together they contribute to a working definition of this dimension.

### Definition of Coping Mechanism through Illustration

#### I. General emotional or cognitive orientation to presented situation:

Score +: Attempts to understand or think about the situation.

Card 1 (P.S. III): A little boy who is really rich and from a nice family. He is not happy with his parents, they expect a lot from him, they expect him to play the violin. He is trying to figure out why they want him to do it. He looks at it for a long time thinking about it, then he hears someone in his fantasy playing a violin. It sounds beautiful. Then he says he understands why they want him to try harder -- Because it's good for me.

Card 1 (P.S. IX): To me he looks like he is going to school, he has a sheet of music. Thinking of whether he should continue. He really has a problem, he doesn't like the idea, his parents want him to though. Trying to think of a way of telling his parents he doesn't want to, trying to think. He doesn't look like he likes it. He will tell his parents. Trying to figure out what else. I know what it's like to play the violin. I couldn't stand it, could be he has to practice and dreads the idea.

Note: The actual ending in these two stories is quite different, but does not affect the final score. In addition, the fact that there is a great deal of external pressure exerted on the hero-figure is not being negatively scored.

Score -: Absence of understanding, passive response to situation.

Card 1 (P.S. VII): Well, this little boy, he's looking at the violin. I have to play this but I don't like to. I wish I could break it. I'm tired of it -- might pick it up and play it, not because he wants to but because he has to because of his parents.

II. Orientation to situation characterized by differences: problems in communication, differences between people, specific conflicts.

Score +: Attempts to deal with them, to understand what they are about.

Card 7BM (P.S. V): Many times a generation gap but a lot of times men and women of different generations get to know each other. Because of hobbies they grow close. These two men started working together. They disapproved of many things. They ended up knowing each other well and liking each other in spite of age differences.

Score -: Passive acceptance.

Card 7BM (P.S. X): I don't know what this looks like. Looks like an old man is trying to manipulate this guy. His opinions are different than the older guys. That one really puzzles me.

III. Orientation to situation which in itself has elements of despair, lack of communication, giving up.

Score +: Attempts to go beyond it, to do something about it.

Card 7BM (P.S. III): A son and his father. They used to be rich, but not anymore. The father is working hard to make his son a lawyer, but not so good because he is an alcoholic. The son doesn't want to be a lawyer. The father is calm but the son won't listen. After a while the father gives up talking and leaves the son alone. The son doesn't want to think about it but it keeps coming back to his mind.

He won't be a lawyer but he will be something else that he wants to be. Something that will help him and his father.

Score -: Passive orientation, absence of reflection or attempt to understand.

Card 9GF (P.S. X): These two are mountain climbing. One girl is enjoying the scenery and the other one looks lonely. She wants to talk to the other one. Both appreciate something different. That happens sometime. I'll appreciate the scenery and the people say what's the matter with you.

IV. Orientation to a 'victimizing' situation which may be hurtful, a source of jealousy.

Score +: Something is done to prevent further hurt, decrease victimization.

Card 9GF (P.S. IX): Both of the girls have been seeing the same guy and one was watching and saw the whole story. She wants to know if they have anything going because she loves the guy, envy in her eyes. She'll follow the girl and ask her and have a discussion about why she was with him and how will end. Neither will go with him.

Score -: Nothing done about the hurt.

Card 2 (P.S. X): This girl looks like she's just been hurt. She doesn't want to look at the guy. It looks like she's in love with the guy. Is she pregnant? The pregnant woman is married to him and she's walking away from him.

Score -: Coping as destructive, creates further victimization.

Card 9GF (P.S. IV): This is a jealous woman following her husband's mistress, lover. She sees when she goes into an apartment and goes in after her and she kills her. She was taken in front of a jury and she was found guilty of first degree murder. She now said she understands that crime doesn't pay.

V. Orientation to change, process of growth, emotional tasks of adolescence.

Score +: Awareness of pain, difficulty, embarrassment of change, growth, learning -- acknowledgement of this and thus attempts to deal with it.

Card 7GF (P.S. IX): Oh wow, to me this is a girl growing up between the ages when curious. Has a doll in hands. She wants to know about the birds and bees. Mother is trying to explain. She's embarrassed, mother is explaining, the best way she can, feels funny talking about it, but she's got to know.

Card 9GF (P.S. V): This girl sees herself as two people. What she is, a nice girl with friends but quiet and how she'd like to be, more outgoing and wants to go out more. She begins changing this way. Her friends don't like it. She drinks more and when she changed to be more outgoing, she wishes she was the way she used to be.

Score -: Denial or lack of dealing with these issues.

Card 7GF (P.S. VII): A mother and daughter, the mother is telling the daughter, talking to her about anything, her doll, the girl is listening but not really paying attention to her, not responding, completely in that other world.

Card 7GF (P.S. X): Looks like the mother is teaching her daughter about the baby. I can't make a story. (Try.) Mother is reading a Bible. I can't figure out why young girl is looking away. Looks like she doesn't care. I think the mother is trying to impress her views on the girls and she doesn't want to hear it.

### Procreational Motives: Theoretical Background

This dimension, scored for TAT Cards 2 and 7GF, is defined as an involvement or pull toward procreation and babies. This concept could be subsumed under Murray's (1943) concept of needs ("Motives, trends, and feelings of the heroes" (p. 7)). He noted that the clinician:

. . . may analyze the behavior in accordance with a comprehensive conceptual scheme which gives every psychologically significant variable its due place or he may confine himself to the observation of a few traits. It all depends on what he wants to know about his subject. (p. 8)

The conceptualization of this category and the interpretation of the data raises several issues. The first is essentially a problem of norms. Murray included as part of the interpreter's task, noting the "unusual; uncommon or unique; or common but unusually high or low in intensity or frequency" (pp. 7-8), suggesting that a great deal of experience with a large number of protocols was a necessary prerequisite to making these distinctions. Henry referred to a similar distinction between "common and uncommon themes":

For each picture there will be a limited series of basic identifications and plots which for any given social group may be thought to be common. . . . It is useful, therefore, to estimate the extent to which the subject tells stories which are in plot similar or dissimilar to the stories found frequently in records of that subject's age, sex, and social group. (1959, p. 74)

Pilot data is not available for Card 2, however, Henry's concept of "seldom noted details" provides a preliminary basis for introducing this scoring on Card 2.

Seldom noted details refers to the fact that some subjects observe details seldom seen by other subjects. These are generally suggestive of special preoccupations or detail compulsions. (p. 239)

He considered mention of possible pregnancy of the older woman in Card 2 as a "seldom noted detail."

Pilot data for Card 7GF provides preliminary norms for a population of 10 patients with the following characteristics: 4 patients classified as "users," none of whom had ever been pregnant; and, 6 patients classified as "nonusers" with a variety of pregnancy histories -- 3 had 1 living child, and 1 of these had a second pregnancy at the time of the research interview and planned an abortion; 1 had a first pregnancy at the time of the interview and planned an abortion; 1 had an abortion two years prior to the interview and one had never been pregnant.

The four stories to TAT 7GF by the four "users" made no mention of babies: the object in the young girl's lap was not mentioned at all in two of the stories; and was referred to as a doll in the other two.

Card 7GF (P.S. I): Mother and daughter. Mother telling daughter about the facts of life. Trying to make her understand about growing up and being a woman. Daughter finds it frightening and difficult

to cope with. Her mother says there is nothing to be frightened of, it is the way of life and it will always be that way. She says, as you grow older you will understand more and you will appreciate being a woman and appreciate what you are here for and your success in life.

Card 7GF (P.S. III): A little girl had a doll, she loved it. Something happened, nothing big, the arm or finger broke. Her mother tried to comfort her, her mother said it was O. K., but she was hurt inside because of the doll. The comforting did not work.

Five of the six stories told by "nonusers" made some reference to babies:

Card 7GF (P.S. IV): Here's a little girl, she wants a baby sister, always plays with her doll and asking her mother why she can't have a baby sister. The mother is explaining she is sterile. The little girl is too young to comprehend. Finally the mother adopts a baby.

Card 7GF (P.S. VI): This is a mother, daughter, and baby. No idea. It's hard. My darling how nice to see your baby. Why are you so sad, you should be proud about your child. Mom, I have so many reasons to have this sad face, but I still would try to change my face to happy with this adorable baby I have in my arms. Her mother said, that's what you should do, go out have fun, show your baby around and make a good life.

The interpretation of this material raises the second theoretical problem underlying this scoring category: to what extent the thema -- pregnancy and babies -- are a reproduction of the subject's reality or a projection of wishes, fears, preoccupations, etc. Murray (1943)

suggested that the attributes of the hero and the situation in which he was immersed in the story were closely related to the experiences of the subject. He further proposed that the situation in the story may either represent that which the subject had actually encountered, something he had dreamed of encountering, or the expectations he carried with regard to the future, would liked to have encountered or dreaded encountering.

The distinction which is important here is between the representation of reality, a situation which the subject actually lives with, and the emotional involvement with something on the level of fantasy. That is, we are interested in exploring whether contraceptive use varies in individuals according to how "close" they are to procreation and babies. The "closeness" we are interested in is best defined as fantasized-emotional closeness in contrast to reality closeness of having a child, for example. Therefore, in the final analysis of the data, the comparison of the "nonuser" never-pregnant subgroup with the "nonuser" pregnant subgroup, will be important in suggesting whether or not the content of the stories was merely reflective of real situations or a reflection of wishes as well. A brief analysis of the pilot findings suggested that the "nonusers" involvement with procreation went beyond the reality of having had a child.

The "nonuser" who had never been pregnant, communicated an interest in preventing conception, but had been having sexual intercourse for two years without using contraception. She described the object in the girl's lap as a doll and expressed wishes for a baby sister. The story ended with the wish fulfilled. In contrast, the one "nonuser" who had had two pregnancies was the one girl in this subgroup who made no references to a baby or pregnancy. The "nonuser" who had an abortion two years prior to the interview, and who also expressed wishes to prevent conception, had been having sexual intercourse since the abortion with no protection. She referred to the object in the girl's lap as a baby. It seems possible to interpret the reference to babies in the stories of the "nonusers," in contrast to its absence in the stories of "users," as an involvement in procreation which has two sources: an involvement in the real caretaking of a child; and, an emotional involvement related to wishes, fantasies (perhaps fears) which is based on more than actual reality situations.

#### Procreational Motives: Scoring Framework (Manual)

Scoring of Procreational Motives is based primarily on item identification on Cards 2 and 7GF.

Score +: Presence of procreational motives

Card 2: any mention of woman as pregnant.

Card 7GF: figure in child's lap identified as a baby, or figure concretely identified as a doll and strongly associated with a baby, or wishes for a baby.

Card 7GF (P.S. VIII): A mother and a little doll or baby. Mother going to ask her what doing with a doll. She'll play with it, will make believe it's a baby.

Card 7GF (P.S. IV): Here's a little girl, she wants a baby sister, always plays with a doll. . . .

Score -: Absence of procreational motives

Card 2: absence of mention of pregnancy.

Card 7GF: figure in child's lap not mentioned and no reference to babies, or figure in child's lap identified as a doll and no reference to babies or wishes for a child.

Card 7GF (P.S. VII): A mother and a daughter. The mother is telling the daughter, talking to her about anything, the doll, the girl is listening but not really paying attention.

Card 7GF (P.S. V): When you're going in your teens can talk to your mother freely about marriage, about having kids. This woman is telling her daughter about life, girl feels sex is wrong, can only be done after marriage.

NOTE: "Kids" were mentioned in this story, however, the context is important here in determining the score. That is, kids is part of a list, symbolic of growing up and does not seem to indicate any procreational wishes. In fact, the object on the child's lap is not mentioned at any point during the story.

### The Interview

A structured clinical interview (Appendix II, p. ) was developed for this study to provide direct clinical material in the girls' own language in each of the four primary research areas. The final interview was based on two stages of revisions of an initial pilot interview. Four girls were interviewed on tape, two during each of the pilot stages. Revisions were made by this researcher in conjunction with a supervising Clinical Psychologist who reviewed the taped interview material. A modification in the interview technique was developed from the supervised review. That is, the actual questions were revised in several areas and it was decided that while the interviewer would duplicate the structured questions with each subject, she would utilize clinical interview skills in drawing the girls out, supporting them in their enriching their own responses, and in testing their limits.

It was clear that there were important gaps in information in the initial pilot material. In essence the girls' responses seemed somewhat stereotyped and lacking in richness. In addition to utilizing clinical supervision as one means of revising the interview, this researcher enlisted the help of several of the teens themselves. Following is a brief example of the method employed with two girls interviewed in the initial pilot phase.

Interviewer: It would be helpful to me if we could discuss the interview we had last week. I'm going to be interviewing other girls your age and I need help in how I can best understand you and your friends and other girls your age. For example, remember when I asked you the question . . . about sex? What I was really trying to understand was . . . What other kinds of things could I have asked you to help you give me more information about that?

The last three parts of the interview were forced choice questions adapted and revised from previous research: Question 21 revised from (Keller, 1968), Question 22 (Bogue, 1970), and Question 23 (Miller, 1976).

### Interview Scoring

The 21 interviews were rated on a five-point scale on nine dimensions (Appendix II, p. 76) by two coders, both of whom were graduate students in Clinical Psychology. Ratings were made from the taped interviews themselves rather than from typed transcripts so that the qualities captured through verbal presentation would not be lost. Reliability between coders was computed for all interviews using Pearson Product Moment Correlation Coefficients (Results, p. ).

### Procedures

Two stages of initial screening of clinic patients, enrolled in the Family Planning Teen Clinic, were included in selecting the study sample.

During the routine medical-social interview and counseling session, the Registered Nurse selected patients who met the criteria for subjects. At the time of this initial interview the "Contraceptive History" was administered by the interviewing Nurse to those girls who met minimum study requirements. The Medical History (part of routine clinic records) and the "Contraceptive History" were then reviewed by this researcher. If this researcher confirmed the Nurse's decision, the patient was referred to this researcher who requested the patient's participation with the following introduction:

I am a graduate student in Psychology and I am doing some research to help me understand more about people your age. Would you spend about an hour with me before the doctor arrives to help me with my school work. This is all confidential.

If the patient agreed to participate, she was interviewed by this researcher. The TAT was administered first, so that the responses would not be influenced by the material in the interview. The TAT was introduced as follows:

This part of the interview has to do with imagination. I'm going to show you some pictures, and I want you to make up a story about each of them. Tell me what's going on in the picture, what led up to it and how it's going to end. Tell me what the people in the pictures are thinking and feeling. It is your story, there are no right or wrong answers.

Following the TAT, the interview was administered and introduced as

**follows:**

Now I'm going to ask you some questions about what you are doing and how you feel about things. Some of the questions might seem personal to you. I would like to understand how you really feel so I would appreciate it if you can try to explain things to me as carefully and honestly as possible.

## Chapter IV

## RESULTS

This chapter will begin with a description of and discussion of selected characteristics of the study population and the larger clinic population from which the subjects were drawn. The data and statistics on the eleven measures of the four hypotheses and the intercorrelations of these measures will then be presented.

Selected Characteristics of the Study Sample  
and Clinic Population

Table 1 is a summary of the selected characteristics of the study sample and Table 2 includes the same material, excluding religion, for the larger population utilizing the clinic during the five months of research interviewing. The tables show that in this clinic population, effective users were generally older than ineffective users, continued in school for longer periods, and whites tended to be better users than blacks, and blacks better users than Puerto Ricans. However, age, education and race did not account for or explain the differences between the two groups. Pearson correlation coefficients, Table 5, show that the intercorrelations between age and group, education and

Table 1  
Selected Characteristics of Study Sample

Characteristics	Ineffective Users (N = 11)		Effective Users (N = 10)	
	No.	%	No.	%
<b>AGE</b>				
14	1	9		
15	2	18	1	10
16	3	27	1	10
17	2	18	4	40
18	3	27	4	40
<hr style="border-top: 1px dashed black;"/>				
<b>EDUCATION</b>				
Dropped out	4	36	1	10
School or graduated high school	7	64	9	90
<hr style="border-top: 1px dashed black;"/>				
<b>ETHNIC</b>				
Black	5	45	3	30
Puerto Rican	3	27	1	10
White	3	27	6	60
<hr style="border-top: 1px dashed black;"/>				
<b>PREGNANCY</b>				
None	5	45	10	100
One	6	55	0	0
Abortions	5	45		
Living Child	1	9		
<hr style="border-top: 1px dashed black;"/>				
<b>RELIGION</b>				
Catholic	4	36	6	60
Baptist	5	45		
Protestant	1	9	2	20
Other	1	9	2	20

Table 2

Selected Characteristics of Entire Clinic Population  
between Ages 14-18 during Five Months of Research Interviewing  
(21 Research Subjects included in these data)

Characteristics	Ineffective Users (N = 43)		Effective Users (N = 30)	
	No.	%	No.	%
<b>AGE</b>				
14	5	10	1	3
15	9	19	2	7
16	13	27	4	13
17	10	21	9	30
18	11	23	14	47
<b>EDUCATION</b>				
Dropped out	21	44	2	6
School	27	56	28	94
<b>ETHNIC</b>				
Black	8	17	5	17
Puerto Rican	28	58	5	17
White	12	25	20	66
<b>PREGNANCY</b>				
None	17	36	30	100
One	26	54	0	0
Two	5	10		
Abortion	18	38		
Living Child	18	38		

Data on religion are not routinely recorded as part of the medical and social history and therefore are not available on the entire clinic population.

group, and race and group did not reach statistical significance though the direction of the correlations confirms the patterns described above.

Though the subjects were not selected with a random method so that the results could be generalized to a large population, it is worth noting that the most recent and major national study (Zelnick & Kantner, 1977) of sexual and contraceptive experiences of young women aged 15-19 highlighted some similar patterns. Their data, however, were limited to black and white young women. Included in their study was the finding that -- "the older the teen at the time of the first sexual intercourse, the more likely it is that she will commence contraception at the same time she begins to have sex" (p. 67). In their sample, black teens had their first sexual experience at a younger age than white teens: at age 15, 38.4% of blacks had intercourse, in contrast to 13.8% of whites, and at age 16, 52.6% of blacks, in contrast to 22.6% of whites.

A comparison of the two tables shows that the ethnic distribution of the study sample differed from the ethnic distribution of the entire clinic population. This difference occurred primarily in the larger number of Puerto Ricans in the effective user group in the entire population (58%), than in the study sample (27%), and in the larger number of whites in the study sample (effective user -- 30%, ineffective -- 45%) than in the entire population (effective user -- 17%, ineffective user -- 17%).

Several hypotheses accounting for these differences follow:

First, the original research proposed that no more than half of the ineffective user population would have a history of pregnancy. Of the 25 Puerto Ricans in the ineffective user group of the entire population, 72% had a history of at least one pregnancy and therefore a disproportionate number of these girls had to be excluded from the study sample. Second, the interview material was prepared for an English speaking population and many of the Puerto Rican girls had difficulty with English. The third hypothesis involves the sociology of the research itself, or the meaning the research developed in the "community" of the clinic. The researcher was known to many of the clinic participants through her previous role in the clinic, particularly as consultant to two previous summer educational programs. Many of the black girls, in particular, had developed a relationship of trust with the researcher over this time period. Within this subgroup, participating in the research became somewhat of a status symbol. Therefore, many of the black girls arrived at the clinic early and their enthusiastic cooperation made the interviews possible.

### Scorer Reliability

Two scorers rated the 21 interviews on nine dimensions, the 11 TAT stories each for 21 subjects on two dimensions, and two TAT stories each for 21 subjects on one dimension. Pearson Product Moment Correlation Coefficients were calculated using both scorers' ratings on all items to establish scorer reliability.

Table 3 shows that the correlation coefficient between the two scorers on ratings of the three different dimensions of the TAT stories were significant at the .001 level. For two of the measures, Coping Mechanism and Transcendence Index, the total score of each subject, based on ratings of 11 TAT stories, was used to calculate the correlation coefficient, and for the other measure, Procreational Motives, the total score on the two stories was used to calculate  $\underline{r}$ . The correlation coefficient between the two scorers on ratings of the taped interview was significant at the .001 level in all cases, where  $\underline{r}$  was calculated for final scores of combinations of items based on the four hypotheses (i. e., Dimension I-Future Awareness, and Dimension II-Future Related to Planning, were combined into one final score for each subject, and these final scores from both scorers were used to calculate  $\underline{r}$ ).

Table 3

Reliability Coefficients for Two Ratings on  
TAT and Interview Variables  
(N = 21)

Variable	<u>r</u> *
<u>TAT</u>	
Coping Mechanism	.71
Transcendence Index	.94
Procreation	.98
<u>Interview</u>	
Future and Planning	.69
Procreation	.84
Sexual Orientation <sup>a</sup>	.90
Internal-External	.84

\*for r of .69,  $p < .001$

<sup>a</sup>N = 20

Table 4

Percent Agreement between Two Scorers on Nine  
Interview Dimensions with a Range of 5 Points  
(N = 21)

Interview Dimensions	Perfect Agreement	Within one Point
I	48%	67%
II	38	71
III	48	90
IV	52	80
V	52	90
VI	52	95
VII	28	76
VIII	48	90
IX	48	90

Table 4 shows the percent agreement between the two scorers on the nine interview dimensions, rated on a five-point scale, for all interviews. It will be noted that for seven of the nine dimensions, the scorers were in complete agreement approximately 50% of the time, and within one point on five of the dimensions, 90% of the time. The lowest amount of agreement within one point was 67% on one dimension.

#### Statistical Test of the Hypotheses

All data were coded and keypunched for computer analysis.<sup>1</sup> t-tests for two independent groups were used to calculate the differences between the means for the eleven measures. The results of the t-tests are reported in Table 5 and summarized below.

#### Hypothesis 1:

Effective contraceptive users have a greater sense of "inner control" than ineffective users. On the five measures of "inner control," the difference between the means of the two groups were statistically significant with the effective users higher on each of the five

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<sup>1</sup>Statistical analyses were performed at the City University of New York central computer facility using the SPSS statistical package.

Table 5

Means, Standard Deviations, t, and p Levels  
for Effective and Ineffective Contraceptive Users  
for All Variables

Variables	Effective Users (N = 10)		Ineffective Users (N = 11)		<u>t</u>	<u>p</u>
	X	S.D.	X	S.D.		
1. Coping Mechanism	25.60	5.70	13.45	4.84	5.28	.001
2. Transcendence Index	71.70	31.44	46.90	21.53	2.13	.05
3. Control-Forced Choice	16.00	2.79	12.18	2.35	3.40	.01
4. Control-Forced Choice	11.40	.84	9.63	1.50	3.27	.01
5. Internal-External	8.30	2.05	3.45	1.21	6.65	.001
6. Future Awareness	17.50	5.50	8.18	3.28	4.77	.001
7. Future-Forced Choice	34.00	7.31	30.00	7.23	1.26	NS
8. Sexual Orientation	22.37 <sup>a</sup>	6.32	9.72	2.32	6.37	.001
9. Procreation-TAT	.60	----	.72	----	.42	NS
10. Procreation-1	7.70	2.11	6.27	3.03	1.24	NS
11. Procreation-2	14.10	4.30	10.27	4.52	1.98	.10

<sup>a</sup>N = 9

variables. The first, coping mechanism, indicated that the effective contraceptive users had a significant ( $p < .001$ ) greater recognition and awareness of either internal states or external environmental situations and evidenced attempts to respond to either of these more than the ineffective users, based on TAT stories. The second, transcendence index, indicated that the effective users differed from the ineffective users ( $p < .05$ ) through a larger production of fantasy material on the TAT's suggesting more of an internalized ability to fantasize and imagine. The third measure, forced choice questions about locus of control, indicated that the effective users defined themselves as having more control over their lives and a greater sense that they could follow through on their plans than the ineffective users ( $p < .01$ ). The fourth measure, another set of forced choice questions, reflected the effective users increased tendency to identify themselves rather than God or fate as the primary determinant in their lives ( $p < .01$ ). And the fifth measure, an overall score of internal-external control based on interview material, indicated that the effective users spoke of themselves as if they actually felt that they made decisions and choices out of an awareness of their personal needs and an awareness of their external reality, in contrast to the ineffective users who characteristically pictured themselves and acted as passive victims of circumstance ( $p < .001$ ).

**Hypothesis 2:**

Effective contraceptive users have more of a future and planning orientation than ineffective users. On one of the two measures of this hypothesis, the difference between the means of the two groups was statistically significant at the .001 level and the difference between the means on the second measure was not statistically significant though it was in the predicted direction. The first, future awareness and future related to planning based on interview material, indicated that the effective users both expressed specific goals and wishes for the future and elaborated plans which logically linked the present with the future more than the ineffective users. The second, forced choice questions about the future, planning and stability, showed no difference between the groups.

**Hypothesis 3:**

Effective contraceptive users have a more internal and positive orientation toward sex than ineffective users. The difference between the means on the final measure, combined from three interview dimensions, was statistically significant at the .001 level. These results indicated that the effective users were more aware of and more readily acknowledged their sexual experience and seemed to experience less guilt than the ineffective users. The effective users were more likely

to feel comfortable about their bodies and their own sensuality than the ineffective users. When the effective users participated in sex it was more frequently out of a sense of personal choice and an active decision making process than the ineffective users who more frequently engaged in sex in response to male pressure. And finally, the effective users expressed more positive feelings about their sexual experiences, feeling that they gained something themselves, in contrast to the ineffective users who expressed little enjoyment and felt physically and emotionally detached from the satisfactions of sexual contact.

Hypothesis 4:

Effective contraceptive users have less of an involvement and fewer pulls toward procreation than ineffective users. The difference between the means of the two groups on the first measure, TAT baby and pregnancy images, was not statistically significant. On the second measure, personal procreational motives, the difference between the means was not statistically significant, though the difference was in the predicted direction. For the third measure, a combined rating of procreation among peers and identification with peer procreation, the difference between the means attained a  $p$  level of .10. The first variable, was an experimental measure and may, in fact, not reflect procreational wishes. The second measure indicated that the effective users were

somewhat less jealous of peers with children and expressed less interest in pregnancy or children than the ineffective users. The third measure, was reflective of the effective users having less of an involvement in a peer culture where pregnancy was the norm, and if they did have friends who had been pregnant they were somewhat less identified with them than were the ineffective users ( $p < .10$ ).

#### Intercorrelations

Intercorrelations among ten of the eleven variables discussed in the hypothesis section and five additional variables -- group (effective users, ineffective users), age, race, education (in school, dropped out), and pregnancy -- were calculated using Pearson Product Moment Correlation Coefficients. The TAT measure of procreation was eliminated as it had no discriminatory power. The results of these intercorrelations are reported in Table 6, showing that a large number of the measures were related in a linear fashion.

The correlations of internal-external control with future and planning orientation ( $p < .001$ ), with peer procreation ( $p < .05$ ), and with sexual orientation ( $p < .001$ ) was essentially built into the research as internal-external was an overall rating of this dimension based on the entire interview which consisted of these three other measures.

Table 6

Pearson Correlations of Group, Age, Race, Education, Pregnancy History,  
and Ten Variables for Effective Users  
(N=21, decimals omitted)

	Age	Race	Ed	Pre	Cop	Tra	Con-1	Con-2	I-E	Fut	FT	Pro-1	Pro-2	Sex
Group			50	77	44	62	60	84	74			27	42	83
Age				44		42	43	28						
Race			40	-50		-40		-38	-26					-48
Education									37	55		27		39
Pregnancy				-45		-45		-52	-47					-50
Coping					49	53	66	80	57					88
Transcendence								50	52					60
Control-1								66	72	40				49
Control-2								50				51		57
Internal-External									87	43			52	85
Future										58			48	68
Future-2														
Procreation-1													66	
Procreation-2														

$p < .10$ ,  $\underline{r} = 37$ ;  $p < .05$ ,  $\underline{r} = 43$ ;  $p < .01$ ,  $\underline{r} = 55$ ;  $p < .001$ ,  $\underline{r} = 64$

Of particular interest, however, were the large number of intercorrelations between measures which were from differing material and scored independently. For example, coping mechanism, scored from TAT stories, correlated with a large number of other measures besides transcendence index ( $p < .05$ ), also scored from the TAT. Among these were correlations between coping mechanism and forced choice control ( $p < .05$ ), forced choice control measuring source of control as the individual versus God and fate ( $p < .001$ ), internal-external ( $p < .001$ ), future and planning ( $p < .001$ ), and sex orientation ( $p < .001$ ).

Table 6 also shows that  $p < .30$  for  $r$  of effective-ineffective group and each of age, race and education, but coping mechanism and race were significantly correlated ( $p < .05$ ), suggesting that whites were higher on coping than blacks, and blacks higher than Puerto Ricans. The table also shows that pregnancy correlated with coping ( $p < .05$ ), forced choice control ( $p < .05$ ), future and planning orientation ( $p < .05$ ) and sex ( $p < .05$ ). However, pregnancy also correlated with group ( $p < .05$ ) and therefore it is not possible to determine whether the girls with a history of pregnancy in the ineffective user group actually differed from the never-pregnant girls in the ineffective group.

### Summary

The two groups differed at statistically significant levels on 8 of the 11 measures reflecting four areas of difference between the effective and ineffective contraceptive users. First, the effective users had a greater sense of "inner control" than the ineffective users. Inner control included a greater recognition of and awareness of either internal states or external environmental situations and evidence of attempts to respond to these; an internalized ability to imagine and produce fantasy material; a tendency to speak of one's self as making decisions or choices out of an awareness of personal needs and external reality; and the belief that the individual rather than God or Fate determines what happens to one in life. Second, the effective users had more of a future and planning orientation. They more frequently expressed specific goals and wishes for the future and specifically articulated plans and steps which logically linked their future goals with present circumstances. Third, the effective users had a more internal and positive orientation toward sex than the ineffective users. "Positive Sex Orientation" included open acknowledgement and awareness of sexual activity which was experienced with relatively little guilt and embarrassment; participation in sexual intercourse out of a sense of personal choice and in response to personal needs and desires; and an enjoyment

of both the physical and emotional aspects of the sexual experience. Fourth, the effective users had less involvement in a peer culture with the norm of adolescent procreation in conjunction with less identification with peer procreation, so that the effective users who had friends where procreation was the norm, were less identified with these friends and were more differentiated from them than were the ineffective users.

There was no statistically significant difference between the two groups in expression of jealousy of peers with children and expression of wishes for pregnancy and/or children or in projected images of babies and pregnancy on the TAT. There was also no difference between the groups of one measure (forced-choice questions) of future and planning orientation.

The Pearson Correlations showed that a large number of the variables were intercorrelated at statistically significant levels.

## Chapter V

### DISCUSSION

In this chapter the results and their implications will be discussed. The following chapter (VI) will illustrate how the findings of the research bear on a clinical understanding of the phenomena at issue here. The discussion in this chapter will explore the implications and meaning of the findings as related to each hypothesis, and then turn to a review of several methodological issues raised by this study.

#### Discussion of Hypotheses

The confirmation of Hypothesis 1 that effective contraceptive users have a greater sense of "inner control" than ineffective users was consistent with findings from other research discussed in Chapter Two (Hill, 1959; Keller et al., 1970; Lundy, 1972; MacDonald, 1970; Meyerowitz & Malev, 1973). On a conceptual level, "inner control" and effective contraceptive use seem to bear a logical relationship to each other. This will be illustrated by defining the different aspects of "inner control" tapped by the measures and then how these aspects are paralleled in the steps necessary to effective contraceptive practices.

One aspect of "inner control" drew on the attitudinal level, defining the extent to which the individual believed that her situation was deter -

mined by personal and individual actions in the context of interpersonal situations or was primarily determined by things out of the control of the individual, such as God and fate. A second aspect, was more closely related to how these beliefs were translated into action, the way in which the person actually lives. The measures tapped the extent to which the individual talked and behaved as if she influenced her life, making choices with a sense of responsibility and self-awareness. The third aspect, was an internalized ability to produce fantasy and imagine, which has been correlated with "the inhibition of an overt motor response directed toward some sort of gratification" (Singer, 1955, p. 260), and with the control of aggressive behavior (Goldberg & Wilensky, 1976).

These three levels of "inner control" are conceptually paralleled by three types of "functions" involved in the contraceptive process. First, contraceptive practice implies an attitude of control, as the methods themselves are symbolic of the possibility of control. Therefore, if the individual's belief system and attitudes are fundamentally opposed to internal control, with the focus primarily on God, fate and even others as the source of control, then contraception would represent a basic inconsistency or contradiction to the individual's value system, even if this system is not fully articulated or is "unconscious." Pohlman (1969) referred to a similar issue in his discussion of

reluctance to practice contraception as frequently related to the belief that birth control constitutes an interference with nature.

The second area of connection between "inner control" and contraceptive practice is on the level of behavior: contraceptive practice involves an ongoing process of decision making. Among the major decisions are the following: when to have sex; whether to use contraception; where to obtain contraception; how and if to tell people about sexual activity; whether to have a pelvic examination; what methods to use; asking questions about alternatives when they are not explained or understood; whether to tell boyfriends and/or parents; whether to use the method which may include daily decisions depending on the method; whether to pick up new supplies, and so on. Clearly contraceptive practice involves many decisions, many of which must be made on an ongoing basis. If an individual does not view herself in control of her life and is not practiced at decision making but more frequently allows things to take their course, then contraceptive practice would present requirements which are both unpracticed and difficult.

And the third level, involving abilities, is closely related to the first two. The focus here is on the internal aspects of contraceptive decision making and while not separate from the behavioral aspects of this, perhaps a prerequisite for them. Decision making requires

that the individual have an ability to imagine and think about having sex, imagine that intercourse has consequences and to sense that there are alternatives to pregnancy, that pregnancy leads to child-birth, childbearing, etc. These aspects of contraceptive practice are closely related to what was tapped by transcendence index. That is, telling a story to a TAT picture which goes beyond mere description, implies imagining a beginning, a middle and an end, feelings and consequences of action. An absence of these abilities would impair an individual's conceptualization of the full spectrum of contraceptive practice, such as the reasons for it and that the practice itself is not magical but involves a series of ongoing steps.

One measure of Hypothesis 2 confirmed that effective contraceptive users more than ineffective users actually think about the future, attempt to integrate these thoughts into their presents and make plans which bear a realistic connection to their total life situations. This finding was consistent with the research of Cochran et al. (1973), Goldsmith et al. (1972), Kar (1971), Oskamp, Mindrok, Berger, and Motta (1975), and Rainwater (1960). The relationship between a future and planning orientation and contraceptive practice can be understood from several perspectives. First, the actual practice of contraception requires foresight and planning. For example, it is necessary to acknowledge the possibility of sexual intercourse occurring prior to

its occurrence, and then make plans based on this possibility. Second, the use of contraception is based on the knowledge that sexual intercourse can lead to pregnancy, pregnancy to possible childbirth, childbirth to an infant who requires care, etc. To know this in a deep way implies an awareness that a future exists which may be determined by the present.

Finally, contraceptive use is related to a motivational system, which in turn derives meaning from the total life framework including the future. Rainwater addressed himself to this point (1960):

First, an orientation to the future, an ability to look ahead, implies that one has some feeling of trust about the future, that one feels the future is in relevant ways reasonably predictable . . .

This kind of basic trust in the future is an important ingredient in that over-all personal stability of which planning is a part, as many writers on ego psychology have noted (French, 1952; Erikson, 1956). Where such a condition is lacking, behavior tends to be oriented toward present interests and pleasures; the individual finds it difficult to postpone pleasure in hope of some future gain, and has difficulty imagining himself as a person who has continuity and consistency . . . that hope of satisfaction activates the guiding influence of a plan and that the ability to plan varies directly with one's confidence of attaining his goal.

A sense of stability about and trust in the future, then, is one precondition for consistent planning. Closely related to this is a belief that one can affect one's future, can determine to some extent what will happen. (pp. 51-52)

The girls with plans for the future had a clear investment in not having

children during their teens, as children would have been an interference with the future. However, for girls with no plans, there seemed to be little motivation to plan for nothing, when there was nothing to make such "non-planning" for a child a worthwhile investment.

The confirmation of the third hypothesis, that effective contraception users' overall sexual experience is more positive than the ineffective users' was consistent with research discussed in Chapter Two (Abernathy, 1973; Coblener et al., 1973; Fujita et al., 1971; Goldsmith et al., 1972; Kane & Lachenbruch, 1973; Lieberman, 1964; Schaffer & Pine, 1972). To a large extent, contraception is more closely and directly linked with sexual experience than with any of the other measures. That is, while contraception can be separated from the sexual act (i.e., birth control pills, IUD) often it is intimately connected with either or both partner's bodily functions (i.e., condoms, diaphragm, foam). Therefore, contraception can be considered as an extension of or one possible aspect of sexual contact and can easily become a mirror of sexual feelings. Simply, negative, conflicted feelings about sex have their effect on contraceptive practices, with the possibility that contraception becomes the focus for "acting out" of feelings about sexual contact. When sexual activity is denied and experienced as something foreign contraception can easily fall outside of the boundaries of the sexual experience. In addition, contraception can easily highlight the

sensual and pleasurable aspects of sex by eliminating the possibility of procreation, so that when sex is not pleasurable contraception may be experienced as extraneous.

The fourth hypothesis suggested differences in procreational motives between the two groups, though only one of the three measures was statistically significant. It should be noted that the interpretations which follow require further investigation as the measures themselves may not sufficiently tap this area. The results of the t-tests together with the intercorrelations between the two interview measures ( $p < .001$ ) suggest the following. Procreational motives play less of a role in contraceptive use than either "inner control," future and planning, or sexual experience. That is, resistance to effective contraceptive use does not seem to be a simple "acting out" of unconscious wishes for pregnancy or childbearing. However, it does seem that ineffective users are somewhat more interested during their adolescence in procreation than the effective users. The most important element of this may be peer group relations. Sanctions against adolescent procreation may be greater for the effective users either communicated directly through the peer group or in the individual's degree of identification with these norms and internalization of peer communications. In addition, those girls who were the most embedded in and identified with a peer culture with a norm of and an acceptance of procreation were most

likely to be interested in immediate procreation and most jealous of their friends with children. Of course, it may be that those girls lowest on "inner control" were also more likely to become embedded in a peer group and mold their own behavior based on peer group norms.

#### Critical Discussion: Two measures of future and planning

The correlation between the two measures of future and planning, interview score and forced choice, was significant at the .01 level. However, only one of these measures, the rating based on verbal taped interviews, yielded significant differences between the means of the two groups ( $p < .001$ ). The forced choice questions resulted in a difference in the means of the two groups in the predicted direction, but these differences did not reach statistical significance. In fact, these questions adapted from Miller's Personal Style Inventory (1974) did not distinguish effective users from ineffective users in several populations studied by Miller.

The two sources of data were actually quite different. In the interview the girls were asked to report or describe concretely how they related to the future and how they connected it to the present. In contrast, the forced choice questions essentially asked the girls to rate themselves, to systematize their self-concepts regarding their futures. The two were intended to measure the same dimension: Miller (1974)

described the goal of scale 4 -- Future and Planning Orientation -- as "to measure the extent to which a woman is future oriented and makes long term plans for the future which she carries out effectively" (p. 5). The instructions developed by this researcher to the coders were as follows: Future awareness -- "Rate the extent to which the girl formulates the future, expressed through specific goals and wishes"; and Future related to planning -- "Rate the extent to which the goals and wishes expressed about the future bear a logical relation and connection to what is being done in the present and what steps are elaborated for the intervening years."

Two clinical case examples, one of an ineffective user and one of an effective user, are described below, as background to several hypotheses about the differences between these two measures.

Gail, an ineffective user, was rated quite low on future and planning by the two coders based on the taped interview. In the interview, she described the goal of going to college so she could become an interior designer. However, she elaborated no steps for achieving this and said, "Hopefully they'll happen," later adding "I'll probably end up having kids and a husband." Her responses to the forced choice were as follows:

- a - I can imagine myself five years older than I am now.
- b - I avoid people who are unpredictable.

True

Very True

- c - I know pretty well what I will be doing in a few years time. True
- d - I like to organize what I do primarily around the plans and desires of my family and good friends. True
- e - I have always lived according to a pretty definite plan. Very True
- f - My plans are often made independent of what the people closest to me want. True
- g - The future seems unclear to me. False
- h - I have made general plans for most of my future life. True
- i - When I am unsure what to do, I will often just wait and see what works out. True
- j - I count on being helped by good fortune. Very False
- k - When I think about myself a few years from now everything seems fuzzy. Very False
- l - I have always had a hard time making plans for the future. Very False

Gail clearly defined herself as very much in control of her future and as an excellent planner.

Allison, an effective user, was rated by the coders as very high on future and planning as she not only articulated specific plans and goals, but had a detailed and clear sense of how she would achieve and succeed. On the forced choice questions, Allison appeared to be less future oriented than Gail.

- a - I can imagine myself five years older than I am now. True
- b - I avoid people who are unpredictable. False
- c - I know pretty well what I will be doing in a few years time. Very True
- d - I like to organize what I do primarily around the plans and desires of my family and good friends. False

- |   |                   |
|---|-------------------|
| e - I have always lived according to a pretty definite plan.                    | <u>False</u>      |
| f - My plans are often made independent of what the people closest to me want.  | <u>True</u>       |
| g - The future seems unclear to me.   | <u>Very False</u> |
| h - I have made general plans for most of my future life.                       | <u>Very True</u>  |
| i - When I am unsure what to do, I will often just wait and see what works out. | <u>True</u>       |
| j - I count on being helped by good fortune.                                    | <u>Very False</u> |
| k - When I think about myself a few years from now everything seems fuzzy.      | <u>False</u>      |
| l - I have always had a hard time making plans for the future.                  | <u>False</u>      |

These two cases serve to illustrate the basis for several comments on the two measures. The assumption is that the forced choice questions are not an accurate measure of this dimension. These questions may be more of a measure of how a person sees themselves or wishes to portray themselves to others. For example, Gail, the ineffective user, responded "very true to "I have always lived according to a pretty definite plan." Her past behavior and her description of her future did not confirm this. That is, Gail said she did not want a child, began "hanging" around the clinic six months prior to accepting contraception and after an abortion which was avoidable. As for the future, she said she would probably end up with a husband and kids even though she wanted to go to college and become an interior designer. Her response to h, k, and l are similarly illustrative of this gap between actual behavior and self-concept.

In contrast, Allison, the effective user, had one of the most well articulated plans and goals in the sample and demonstrated through her contraceptive behavior, admission to college and obtaining of scholarships and loans an ability to plan and carry through on those plans. She appeared less future oriented than Gail on the forced choice questions, responding "false" to "I have always lived according to a pretty definite plan." In response to both k and l, Gail was more emphatic than Allison, as if she were in no doubt at all about how things would work out. It may be that the scales do more than measure self-concept. It seems that, in part, the scales may measure or be affected by "cognitive style." The more obsessive individual's perfectionism might result in an underestimation or a devaluation of their own accomplishments, in contrast to an "hysteric's" tendency to perhaps generalize from several small accomplishments, to take a more global approach. If in fact, the scale is affected by "cognitive style" then the results would be skewed as we might expect that the more obsessive responses would also be linked in reality with more of a future and planning orientation.

#### Contraceptive Effectiveness Criteria

Ironically, one of the most complex methodological issues in this study was the differentiation of the clinic population into two subgroups.

While the criteria outlined in Chapter 3 were utilized to distinguish effective from ineffective users, informal longitudinal observation (7-11 months) indicated that these subgroups were not entirely stable. While most of the measures confirmed the hypotheses at statistically significant levels, and the two groups were therefore distinguishable in terms of specific "personality" dimensions, it seemed that these "traits" had most meaning when viewed as "warnings" or indicators of high-risk for pregnancy. That is, observations made by this researcher in informal contact with the girls during 7 to 11 months following their interviews indicated that total life situation complexly interacted with patterns of use. More specifically, the clinic services themselves had the potential for becoming a part of the girls' life situations, interacting with personality to change use patterns. The reverse was observed as well: changes in life situation affecting the relationship with the clinic. Three clinical examples serve to illustrate the nature of these potential shifts in contraception use patterns.

Angela, a 15-year-old Puerto Rican girl, had sexual intercourse approximately once a week without contraception for 10 months prior to her initial clinic visit. Since, her first visit, however, which was at the time of the research interview, she utilized the pill regularly. During the two clinic visits, six and eight months following the research interview, she utilized the pill regularly. During the two clinic visits,

six and eight months following the research interview, she was asked by this researcher why she made her appointment when she did: the appointment was made prior to running out of birth control pills, reflecting good planning. She said she made the appointments as soon as she received the clinic follow-up reminder letter, which was regularly sent to all teen participants two weeks prior to their advised next appointment.

Angela had the lowest scores on coping mechanisms, internal-external control, sexual experience, and among the lowest on many of the other measures. Initially classified as an ineffective user, based on her past behavior, she would have been classified as an effective user eight months later. Interacting with her, one would describe her as somewhat childish, passive and dependent, though extremely cooperative. While lowest on most dimensions, she was rated as having less procreational motives than any of the other ineffective users and many of the effective users. We could hypothesize that once she overcame her initial fears associated with the pelvic examination and contraceptive use, her desire not to have children highly motivated her to maintain a contraceptive routine. However, it was possible as well that the clinic itself was an important "external control" in her life. That is, interpersonally she depended on external situations, pressures and demands, and these determined her actions. While sexually this

meant that she felt abused and humiliated, she could respond to positive forces regarding her reproductive health.

Gail, an 18-year-old black girl, could also have been reclassified as an effective user 10 months following her research interview. She had not utilized any form of contraception for the four years she was having sex prior to her abortion. Since the abortion, she like many other girls had become a meticulous clinic participant. She received the lowest score on transcendence index in this population. Clinically it was clear that the brevity of her stories was partially attributable to a somewhat rebellious attitude, perhaps related to a distrust of authority and particularly white authority. Her low score, though, also seemed to reflect a deficit of the processes and capabilities measured by the index. It was possible that Gail had to externally "act out" or concretely experience the consequences of unprotected intercourse as a way of really knowing the consequences. The services of the clinic could then, following pregnancy, become an alternative external or concrete control.

There were several girls, who eight months following the research interview would have been reclassified as ineffective users, though initially in the effective user subgroup. Bridget, a 17-year-old white high school graduate, utilized the pill effectively for one year prior to the interview. All of her scores were close to the mean of the other

effective users except for future and planning orientation where she more closely resembled the ineffective users. Bridget spoke vaguely about the possibility of college, but eight months after graduation, she had not enrolled in college and her employment situation was not fulfilling. In an informal discussion with this interviewer, she spoke vaguely and with little enthusiasm about a possible marriage. She said her recent irregular use of the pill was related to the possibility of marriage. It was not that Bridget was actually planning a child with her fiancé, but that she could no longer find a reason for preventing pregnancy. It was as if her own internal controls or that which earlier had contributed to her pill use did not carry her beyond the structure of high school. As she experienced a breakdown or a crucial change in her life situation she could no longer respond thoughtfully to her sexual and reproductive life.

In summary, the time limitations of this study precluded the formal collection of longitudinal data. However, informal observation made it clear that while the two subgroups had different contraceptive use patterns at the time of the research and were distinguishable along the dimensions measured here, these subgroups were not invariable. These case illustrations suggest important elements of clinic interventions and direction for further research.

Family planning clinics have the potential for establishing themselves as alternatives to pregnancy. For girls who are at high risk this means that the clinics must be visibly quite active both in their structure of services -- follow-up letters and re-visit schedules -- and in the quality of service delivery -- active personal counseling which promotes an attachment between the "patient" and staff. Further research should include observations of behavior over longer periods of time, particularly when the population studied is adolescents who are themselves in a period of rapid change. It may be that contraceptive use patterns need to be distinguished according to more than a two-dimensional system, but rather by a more complex system which reflects the various patterns of use.

#### Further Implications for Prediction and Intervention: The Measures

One purpose of this study was to suggest methods of prediction of adolescent high risk for pregnancy so that family planning counselors could efficiently allocate outreach, counseling and follow-up resources. The intercorrelations of the measures (Table 5, p. 79) showed that many of the variables were correlated at significant levels with coping mechanism, internal-external control, sexual orientation and future and planning (each correlated with eight to nine of the other measures).

Of these, the last three were based on clinical judgments of verbal interview material. This suggests that more elaborate prediction tools such as the TAT and forced choice protocols are not necessary for meaningful prediction but rather, counselors can be trained -- to ask patients simple questions, and develop skills in evaluating both responses to these questions and general attitudes and behavior manifested in the interview situation.

These questions might focus on the patients' educational and future plans as this measure was intercorrelated with forced choice control, internal-external control and sex orientation at the .001 level. Interviewers might then be trained to ask themselves a question about each patient, for example: "Is this someone who seems to make plans, formulate goals, and make decisions out of a sense that her own activity will affect what happens to her in contrast to not being able to formulate plans, decisions, etc." In the course of contraceptive counseling, sexual attitudes and behavior about sexual behavior could be used to assess more general functioning, as internal-external control was correlated with sex orientation at the .001 level. In fact, the high correlation of sex orientation with other measures is reminiscent of Sullivan's (1953) statement that a person's sexuality may be reflective of larger personality issues and interpersonal patterns. Taking the proposal for assessment techniques one step further, it may be that

counselors could focus on the patterns of interaction between themselves and the patients as a crucial source of data about the patients' typical mode of interacting. For example, if the counselor finds herself "working very hard" in the interview, frustrated and not understood, then it is likely that even more work is necessary in supporting the patient in her efforts to prevent pregnancy.

Essentially these findings suggest that the various research discussed in the Literature Review section (Chapter 1) and the Hypotheses section (Chapter 2) may not be in agreement because of different conceptual or theoretical frameworks. The results of this study suggest that there may be an underlying factor which cuts across different measures. Further studies might explore this possibility and discover ways of defining this common dimension. For the purposes of intervention, though, this research suggested that prediction of high risk for pregnancy may be taught to family planning counselors -- they can be taught to refine their clinical interview techniques, assessment skills and their use of their own feelings in the interview situation.

## Chapter VI

## THE GIRLS SPEAK FOR THEMSELVES

This chapter is where we will have the most direct contact with the girls themselves; where they tell us in their own words what things feel like and look like to them. In integrating their stories, I will speak through them as much as possible. That is, I will briefly comment on their "stories" as a way of focusing on how they seem to experience things. Many different theories could be made to "fit" their words; however, such a "fitting" would be more of a technical exercise than a step in coming closer to knowing them. The Literature Review in Chapter 1, summarizes the various descriptive languages which have helped to codify and conceptualize similar patterns and phenomena to those presented here.

First, the "stories" of the ineffective contraceptive users will be presented and then the "stories" of the effective contraceptive users. Each of these subsections will be further structured by the three main areas of the interview: Future Orientation, Sexual Experiences, and Procreational Motives.

### Ineffective Users

#### Future Orientation

The interview began with an exploration of the girls' school functioning at the time of the research, attitudes towards being in or out of school and whether and how they related their present to their future.

Roxanne, a 16-year-old white girl, first had intercourse at age 13, an abortion at 15, and knew about contraception and where to obtain it two years prior to her initial clinic visit. She frankly expressed how disappointments and losses instilled a sense of hopelessness which became translated into a negative or fated view of the future and thus a "decision" to make no decisions or virtually a denial of the future as organically and controllably connected to her. Roxanne had dropped out of school, responding to the question -- "Do you plan on going back to school?"; she said, "No, I never think about it." She continued, in response to -- "Do you ever have thoughts about when you'll be 21?":

No! My mother won't let me leave the house now.  
When I'm 17 I'll try to leave -- my mother and I  
fight a lot.

Q: Do you ever have other thoughts about the future?

A: NO!

Q: Is there some reason why you don't like to think about it?

A: A lot of times I plan things and they never happen. I knew this guy, we're not going together now. We planned to get an apartment, we planned to get engaged and then we broke off for a month. That's why I don't plan anything. I had my hopes all up. When my niece was in the hospital, I said -- "When she comes out that we would do this," and . . . she had pneumonia. She passed away. That's why I don't plan things. If they happen, they happen, you know.

Michelle, a 14-year-old white girl, who represented a somewhat less high pregnancy risk than Roxanne, as she first attended the clinic six months after her first sexual experience, seemed to similarly feel threatened by and distanced from the future. In response to -- "Do you ever have thoughts about the future?" -- she said:

Dreams! I always wanted to be an acrobat and then I thought of getting married. I was never smart, but dreamt of being an acrobat, an ice-skater.

Q: What kinds of dreams do you have now?

A: Just about Billy, my boyfriend.

Q: Do you think you'll be an acrobat?

A: No.

Q: Have you thought about what you'll be doing in five years, when you're 19?

A: I don't think about the future. I mainly think about what I'm doing now.

Q: Can you think about five years from now?

A: It's too hard.

This attitude of doom and despair was reflected in Roxanne and Michelle's behavior, as well, with both having dropped out of school

because they "were always in trouble." Evelyn, an 18-year-old Puerto Rican girl, who was pregnant at the time of the interview (pregnancy was diagnosed following the interview, during the medical clinic), described more fully than the other two girls how "trouble in school" had affected her.

No, I'm not in school now. I dropped out in my third year. I liked school a lot. I had too many problems when I quit school -- fights with other girls, the girls used to pick on me. My mother used to have to go to court for me, for my playing hooky. It came out alright; my mother used to talk to me -- "try to be good until you're 16, then when you're 16 I'll take you out of school." So I acted right in school, no one picked on me. When I quit school I started taking night school.

Q: Do you think you're going to graduate night school?

A: I can't really say because I don't really know, if I do or if I don't. I can't really do anything about it. I try my best.

Q: Have you thoughts about the future and what are they?

A: What do you mean by the future?

Q: Do you have any kinds of thoughts about the future, for example about when you'll be older?

A: I thought in a way so many of the problems I've been seeing that I hope I don't go through them either. Like, if I have a problem I just go to my mother. She says -- "do this . . . do that . . ." I'll sit down for a while and stay thinking and I say to myself -- there is only one mother who can give you advice. That's it.

Q: Other thoughts about the future, let's say, when you're 23?

A: I never think of it now. I'll wait for the time to come. In my 20s I would like to have a kid and I would like to study for a nurse.

Q: Do you think you'll accomplish that?

A: I can't say I'll accomplish that. I can just say that's what I would like to do. I don't know what will happen from now to then.

Q: What are the sorts of things that might happen to prevent it?

A: Like some people get into your problems -- don't be this, don't be that. Some people give you good advice and some don't give you no good advice. They mess you up and mess up your life.

Q: You seem to think those things might interfere.

A: Yeah.

Evelyn expressed more open conflict about feeling fated than either Roxanne or Michelle. Her self-concept, though, seemed to be an endorsement of dependency and passivity. In deriving her actions almost exclusively from the influence of others, she ended up placing her "wishes and hopes" as much outside of herself as she did the causes of her "trouble." While she did not completely negate the future, her type of embeddedness in the present limited her conception of choice and potential for influencing her possible choices.

Jane, an 18-year-old white girl, in asking questions about the future -- "I just want to know what's going to happen . . . where I'll end up . . . who I would be with . . . How many kids?" -- seemed to place herself outside of her own experience. In further elaborating on her sense of fatality -- that she would end up right where she was at the present -- she added something not mentioned by the other three girls:

"I don't like change, I'm scared of what will happen." In response to -- "Have you ever had any big changes in your life?" -- she added -- "NO, maybe that's why I'm so scared."

Several of the ineffective users had specifically formulated ideas about the future and did not evidence quite so much despair or hopelessness as the girls quoted above. However, they were still different from many of the effective users in their lack of planning and preparation for the future. Gail, an 18-year-old black girl, for example, expressed ambitions and the desire to achieve, to not fit the marriage-baby mold of her peers; yet, she found elaborating the steps, the way to realize her goals, very difficult. Her contraceptive history seemed to parallel the dynamics implicit in this pattern. She dropped by the clinic many times before requesting contraception and only began using birth control pills following an abortion, which could have been prevented as she had been encouraged to utilize medical services prior to the pregnancy. It was as if she had to be "shocked" into making a change and was perhaps, limited in her anticipatory abilities. Even in her brief description of school, she made it clear that things frequently caught up with her though she ultimately got them done.

The problem with school is subjects. Algebra, for example, is a tough subjects. If she gives you homework, you've got to do it. If she gives homework the next day and you don't do it from the night before then you have to catch up on the last one too.

- Q: What do you do when that happens?
- A: It happens a lot. I got to another algebra teacher for help.
- Q: Why are you planning to graduate from high school?
- A: Cause I want to, so I can go to college and get a good job. This is what I want to get out of life.
- Q: Any thoughts about the future?
- A: I want to go to college in interior design and get a good job.
- Q: Have you thought of the things you might do to make these things happen?
- A: No, hopefully they'll happen.
- Q: What about thoughts about five years from now, when you're 23?
- A: Probably have kids and a husband.
- Q: What makes you feel that way, and what would you like?
- A: I would like to go to college. I don't know I just feel like I'll end up with kids.
- Q: Does it have to do with the way you see your life going now or your friends lives?
- A: The way my life is going now.
- Q: Have you thought of things you might do so you could go to college?
- A: Yes, graduating first. (laughs)
- Q: Other things?
- A: Getting a job while going to college and meeting some people who know.
- Q: What about the husband and baby?
- A: I want it in life, but after 23.

The quality of Gail's interaction with the interviewer reflects as much of an absence of assertiveness and active control as does the actual content.

### Sexual Experiences

For the ineffective users, it was not as if their inattention to the future or lack of planning for the future had its compensations in the present. Rather, each moment appeared to be fated and perhaps even hated, at least in relation to their sexual experiences. Effective contraceptive use requires a great deal of bodily and emotional attentiveness to the self. Many of the ineffective users expressed a lack of personal attentiveness concerning both sexual decision making and sexual fulfillment and pleasure. Several girls, for example, reported being talked into or pressured into sex by their boyfriends. It was as if what they wished for in life they envisaged no way of achieving and that which they felt hesitant about or specifically did not want ended up happening.

Jeanette, a 15-year-old Puerto Rican girl with a history of two abortions and sporadic contraceptive use, in spite of regular visits to the clinic, told us about how she first had sexual intercourse and what it meant to her since then.

I don't know why, because the first time was in his house, that's when I was a virgin. He kept telling me how we were going to get married and

stuff like that and how I shouldn't be afraid. He thought I was another type of girl -- like the kind of girl who goes around with a lot of guys and I told him I was a virgin. He told me I was a liar. I said -- "If you don't want to believe me then don't." He said -- "Are you sure?" and I said -- "Yes." In my mind I said what am I going to be shy for because I knew him for four years. So what I did was say -- "I'll prove it to you." So we had sex and then he said -- "Now I believe you."

Q: So you had intercourse with him the first time to prove you were a virgin?

A: Yes.

Q: Why then?

A: Because probably he would have thought I was from the other girls who had sex. But I didn't really want to have sex. I wanted first to be married, to get engaged to be married and then on the honeymoon to have sex. I don't know. I was stupid.

Q: There must be some reasons why you have sex now. Can you tell me why you have it and what you get out of it?

A: You don't get out of it that much. Sometimes to have fun and to enjoy, not really to enjoy.

Q: You're making a face -- what is that saying?

A: I don't mind having sex, but every day is too much. Some girls have it every day, they're out of their minds. I'm not like that.

Q: I'm not sure why you have sex.

A: I don't really know myself.

Q: What is happening inside of you before you have sex? Like what kinds of talks, discussions or arguments do you have with your inner self before having sex?

A: They start trying to kiss your mouth first, that's when the girls start getting hot. Before you have sex, they try to get you hot and you just don't want to. You feel like pushing them away. They want to feel enjoyment but they don't care how you feel. Me, I don't know what they're doing. Like you're watching TV and you're tired. If I tell him, you know how guys are, they start getting mad.

Q: What about after sex. Try to think back to how you usually feel after you've had intercourse.

A: Start thinking, they just lay down. I start thinking that I just get tired and weak like I don't want to have sex for the whole month. You lose weight like that. Feel like sweating, feel disgusting, just want him to get out. Just want to get up and take a bath. I don't really like sex that much. You get sick or you can get any kind of things.

This researcher's more intimate knowledge of Jeanette indicates that her contraceptive use seemed patterned after or closely related to her general living situation, perhaps like many of the other girls. That is, her life was fraught with instability: beginning with her father's early departure from the family, her series of stays in residential homes following difficulties in school or running away from home, and finally at the time of the interview, her monthly moves back and forth between her mother's home and her boyfriend's mother's home. Her resulting confusion was reflected when it was recommended by this researcher that she follow a high iron and protein diet for her long standing anemia. She requested two copies of the list of special food, one for her mother and one for her boyfriend's mother, as she did not know who would be

preparing her meals in the coming weeks. Both her parenting and her contraceptive use seemed related to and quite dependent on fluctuations in relationships with men. For example, she moved from her mother's home to her boyfriend's, when her mother began living with her boyfriend's older brother, who was 15 years younger than the mother. Similarly, she threw her contraceptive pills away several times following fights with her boyfriend, beginning a contraceptive schedule only after her boyfriend picked up new supplies for her at the clinic.

While many of the girls reported male pressure or interest as the primary reason for their engaging in sex, they also talked about how it made them feel special. "Special feeling," however, did not seem to have the same meaning for them as it did for the effective users who were referring to something closer in meaning to mutual sharing. For these girls it seemed to mean winning out in a competition -- being special by virtue of being chosen. In spite of "feeling special," they seemed to live in the shadow of their own passivity. Frequently they felt mad, disgusted and angry at their boyfriends. The "special feeling" seemed to mask a gnawing emptiness related to the extent of denial required in feeling chosen by someone who on a deeper level was resented and disliked and experienced as violating their own integrity.

Sandy, a 17-year-old black girl, experienced her first sexual intercourse at 13 as rape. She described trying to telephone her

mother and sister from her friend's house prior to sex, and said in the interview -- "At that time I didn't like boys . . . and, I couldn't stand him after that." Responding to the question about how she felt about sex in the present, she said -- "I used to didn't know. I think it bothered me more than I enjoyed it. But my boyfriend makes me feel kind of special. But I still don't like it." And after sex, she felt -- "kind of evil, and I get mad very fast." In response to -- "Do you ever feel like it's not really you?" she said -- "Yep, not that I'm not there but that I'm not supposed to be there." And finally -- "I have a bad habit, if I decide to have sex with a guy and then don't want to I'll just start disliking him even though still going through with sex."

Laura, another 17-year-old black girl, seemed to experience things similarly to Sandy. Before sex, she thought to herself -- "I'm not going to do it. I'll try to get mad at him so I won't have to do it. Or I'll just forget about it and do it. I don't know, maybe I'm crazy. Just sitting there, sometimes it will be me who wants it, actually only once. I'll get so bored so I have to have something to do with my time." She added -- "It makes me feel good because then I'll know that he won't go out and mess around with someone else. When we have sex that makes me feel good because he came to me and asked me. That's the main feeling, that he came to me." She seemed to end up quite unrelated to what had happened to her, reflected in her response to "Do you ever feel

like it's not really you?" -- "Yeah, two weeks ago I didn't think it was me. After we got up, he said -- 'How did you like it?' -- and I said -- 'How did I like what?' -- real crazy."

Angela, a 15-year-old Puerto Rican girl, spoke for herself in the following passage:

I had a boyfriend, he started talking and I said, NO, NO, NO, because I was 13, and then when I became 14 I started liking him more and more, but I couldn't get myself to do it. I would sit and think and then when I turned 15 he said -- "If you like me the way you say you like me then you'll do it." In my mind I said, NO, NO, NO. Then one day, I just let it happen. I didn't think of nothing. I just let it happen. . . . In my mind I was saying No, my mother, my mother. My mother found us and she was asking me why and I explained it happened, I didn't think. She took me to a doctor, I tried to understand what she said when she explained the facts of life to me, but I couldn't understand that much, so I just listened. . . .

Q: There must be some reasons why you have sex now. Can you tell me why you have it, what you get out of it?

A: I don't get nothing out of it. I don't want it but the men want it. I don't know what they get out of it because all I get out of it is a mess. I say No, but then sometimes you can't say No. It's a mess. . . . I was stupid to do it in the first place. I think about how my mother brought me up and how I did something like that so early. I just let it happen. Sometimes I just look and say No and then I say no so many times that he will get mad at me. It was all so messy.

### Procreational Motives

While the differences between the ineffective and effective users was only statistically significant on one measure of procreational motives, each group contained a subgroup of girls who on the transcript material did seem to describe different experiences of themselves and others in relation to pregnancy and childrearing.

Most of the girls in the study sample had contact with other girls their age who had been pregnant. However, the ineffective users appeared to be particularly embedded in a peer culture where pregnancy was the norm. In part, the embeddedness may have related to neighborhood (physical proximity), as peer groups in Hoboken formed on street corners and in parks. However, many of the black girls, for example, in both the effective and ineffective group, lived in the projects where a large number of girls not only became pregnant in their mid-teens but were highly visible. Therefore, it did seem that embeddedness had a personal internal meaning and source as well.

The interview questions were structured to tap the girls' procreational motives: how close they appeared to be to wanting pregnancy and/or children at the time of the interview. Feelings or attitudes towards childbearing of the ineffective users, in part, paralleled their sense of the future and their sexual experiences. The seeming contradiction of their sex lives -- where specialness and disgust existed

together -- was similarly reflected in the area of procreation. Babies and pregnancy were viewed as a fated accidental part of life and at the same time they became a way of filling an emptiness or possessing something, and then, as with sex, they seemed to have a questionable value or were related to with a great deal of ambivalence.

Some of the girls conveyed the sense that wishes for a child or what we are calling procreational motives were minimally related to pregnancy or childbearing. Rather, procreation became a vehicle through which critical developmental issues of adolescence were expressed and experimented with. Adolescence has been described as a second period of separation-individuation (Blos, 1962). Many of the girls seemed threatened and overwhelmed by the challenge of differentiating from parents and peers and rather than struggle with individuation became like their mothers before them and their friends -- through wishes and actions towards childbirth.

Evelyn, an 18-year-old Puerto Rican girl, conveyed both difficulties with differentiation and the role of jealousy in her desires for children.

Q: We all have feelings when we see someone who is pregnant. Can you tell me the specific feelings and thoughts that you had when you heard your friend was pregnant.

A: Oh my god, it can't be true this girl is pregnant. I say, how did it happen. Well, she got drunk one night and she got down with a guy and that's all and that's how it happened. I say, I wonder when I'll be like that. She looks so cute in a dolly dress. I get

a lot of feelings when I see my friend's pregnant. In a way I start thinking of myself, she's so young, why does she do that -- she won't be able to party, will be stuck in the house. When I see a girl like that I think about how I'll be having the same problems too. I won't be able to party. A lot of girls get feelings. They criticize you. A friend of mine has a bad problem and . . .

Feelings around friends who already had children intensified Evelyn's conflict.

I see them and I say to myself -- they're younger than me, man, I would like to have a kid and they have one already. Why couldn't I have one if they could have one already so could I. I see them and I say to myself -- in a way they mistreat the babies when they hit them when they're so small, and I say to myself -- God gives kids to the bad people and to the good people, the people who want them, don't have them. When I have a kid I'll be so happy. I really want one. I see 15 and 14-year olds with babies in their hands and think -- why can't I have one I'm older than them. I start saying to myself, pretty soon I'll get there.

Laura, a 17-year-old black girl, was quite critical of her friend Cookie who had been pregnant three or four times. In reacting to a projective story about a pregnant adolescent she said:

I told her she shouldn't have done it. It's her life, she should have done what she wanted. The friend I'm thinking of she's only 13 years old. When she becomes 14 her baby will be one. That was really too early for her to have a baby. I would tell her that the boy don't care about her because he don't. Most of the boys out there now, all they do is make babies and leave. You know who takes care of them -- welfare.

When Laura was with friends and their children, she seemed to forget about the consequences of childrearing which she began to elaborate in the earlier passage. She said, she felt:

Oh, I want me one. Everytime I see someone pregnant, I'll be touching their stomach. I'll say -- "Oh I want me one so bad." That's what makes me think I want one. If I don't see no one with a stomach then it don't bother me.

Even when the wishes for a child or the jealousy of friends with children were quite strong, the need to deny such feelings existed which meant that the girl was not only not making a decision to not have a child but not making a decision to have a child. This was particularly clear in the statement of Daisy, a 16-year-old black girl, who first had intercourse at age 14, attended the clinic irregularly for one year and then became pregnant several months following the research interview. She viewed her pregnant friends as happy, and said -- "I was wishing it was me because she was pregnant and I wanted a baby. I want to go through that feeling too. Kind of happy and sad in a way. I wish I was pregnant and I felt down because I wasn't." The interview continued with some confusion:

Q: What do you see as the cause of your friend's becoming pregnant?

A: Laying down there and didn't know what was doing. An accident.

Q: You were just saying that when you were with your friend you wished it was you. I'm trying

to understand because you said it was an accident but you're also saying that when you're with your friend you wish it was you.

A: Yeah. At the time that's how I was feeling. But I don't really think to myself that I want to get pregnant. It's just like an accident, all of it was an accident. But when they get pregnant and know it, they feel so happy about it.

Q: When you're with a friend with children, what feelings do you have?

A: Just a beautiful baby. I wish it was mine.

In response to the projective story about Karen, Daisy said:

Maybe Karen was fast, and she never stucked to one guy, something like that -- so she became pregnant. It was an accident. She didn't mean it.

Q: What feelings do you have about it?

A: I can't feel nothing because it ain't mine. She became pregnant so I'm very happy for her but maybe mine's inside. I wish it were mine.

Calling pregnancy accidental, seemed to be Daisy's way of saying that she could not take explicit and full responsibility for getting what she wanted.

### Effective Contraceptive Users

#### Future Orientation

Effective contraceptive users related to the present with the future in mind, conveying an attentiveness to how they were able to

logically and productively move from one to the other. Their descriptions of the present reflected a self-consciousness and emerging sense of self which may underlie the differences between them and the ineffective users: they seemed to have the necessary qualities for actually conceptualizing the future. The effective users frequently referred to themselves; where the ineffective users more generally referred to circumstances. The contrast was clear in their differing descriptions of school: The ineffective users often said things like -- "I was always in trouble in school, the teachers and kids gave me a lot of trouble" -- and they found their "resolution" in dropping out of school. In contrast, one effective user said -- "Even though I was stubborn in school . . . You have to say I have to get this done and this done and then I play"; or another girl who said -- "I'm not the kind of person who can just sit back and see everything done for me. I've always liked to do things for myself."

Catherine, an 18-year-old black girl, began using the pill about one year prior to her first sexual experience -- "just in case." She lived in the projects where many of her friends were pregnant, or, in her words, where -- "there is an epidemic of pregnancy." For her, though, there were two peer groups: one, determined by geography (her peers in the projects), and another, determined by mutual interest (friends she had sought out and chosen). The second peer group whose

influence she described in her discussion of her future clearly had an impact on her plans. Catherine seemed to have differentiated from her peers in a manner that was unusual in the ineffective user group, reflected through the initiative she took in seeking out other less available influences. She described her involvement in school as follows:

I'm in the eleventh grade now and I graduate next year. School is okay. I can dig school when I want to. I have to discipline myself sometimes. School itself, the system is okay. You can't wear dungarees or sneakers and I like that. I can deal with it, even though I was stubborn when I got there. They tamed me a lot so I can follow the rules. Other than that it's nice. I have no trouble at all getting along. There's time for play and time for work. The majority of time I play a lot. You have to say I have to get this done and this done and then I play. I like it.

Q: You find that you're able to discipline yourself?

A: I have to. Last year there were times when I goofed off a lot and when I saw my report card I said -- "We'll let me stop because I want to go to college." I really do. I played first and second semester, but third I got down to business.

Q: You want to go to college?

A: I can't see myself going straight out of high school and then working. This way I'll try to get a grant or scholarship and go to two years of college and get out of New Jersey because I can't take New Jersey. I want to get out and go to Boston or Washington and then come back to New York and go to fashion school for one year. I can't take it here.

Q: Do you think you'll graduate from high school?

A: Definitely. I'm getting out. There's nothing here. The job market is down. If I don't get out I might as well get married and have a kid and I'm not going to have none of that.

Q: Do you think you'll go to college?

A: I really want to go, but the money situation is difficult. My mother was saying I should go. Years ago I was saying -- What the hell, what's the use of college? Now I see what she's talking about. Even if the loan's only for two years. I can always go back and major in something. I'm going.

Q: Do you think about the future?

A: All the time. Soon as I get out of school I know I'm going to college and then I want to do some modeling, so during the two years I'll work and then in 1979 I should be back in New York going to fashion school. The school I want to go to has placements, so right after you graduate they get you into a job so you'll have experience and meeting people and you've got to have connections. Maybe by 28 I'll decide to get married. Definitely I'll be out of New Jersey. By the time I'm 26 I should have the career part the way I want it. After about four years of marriage I'll start having kids. If everything goes okay and my husband's education and money is okay, I'll do it. I'm not busting myself so my husband can work at a \$200 a week job.

Many of the effective users had specific career aspirations and clearly articulated goal oriented plans. Allison, an 18-year-old white girl, who used the diaphragm the few times she had sexual intercourse in tenth grade said:

I'll finish high school in June and then I'll go to college in September. I'm going to major in health education for the first year and then transfer to physical therapy for the second.

Q: Do you think you'll end up doing physical therapy?

A: I think so. I'm interested in that kind of stuff.

Q: What kinds of things will you have to do in order to become a physical therapist?

A: Take courses in basic science first. There is a program at North Eastern with a practicum. I know if I put my mind to the sciences then I'll do it. I'm more worried about the social parts of college than the academic. The high school I went to is not a good one. Hoboken High is bad and I resented the fact that I had to go there. I know if I put my mind to the academic and study then I'll do it.

Q: Do you have other thoughts about the future?

A: I think about where I'll be. Do you want to know specific things?

Q: Yes.

A: After I finish school I'll go to Vista or the Peace Corps and then I'll probably settle down and have a job -- a room of my own.

Q: Do you think these things will happen?

A: I'm not sure about the Peace Corps. I'll have to wait until I get out of college to see how I'll feel.

Q: You're definitely planning on graduating from high school?

A: Yes. I would like to get married when I'm 26 or 27. I'm not sure whether or not I want children. I don't know whether I'd be capable of having a child -- I don't mean physically, but knowing there is so much you have to give to a child.

Marcia, a 17-year-old black girl, with the highest career aspirations in the sample, began using contraception one month after her first sexual experience. In her statement, she expressed both a self-reflectiveness and pride in who she was.

I'm in the twelfth grade. I do well in my grades and I've been going to this school since seventh grade. I'm outgoing, I get myself involved in class activities. I like school.

Q: How do you happen to become involved in all of these things.

A: I'm not the kind of person who can just sit back and see everything done for me. I've always liked to do things for myself. I'd like to be a doctor and I'd like to better myself.

Q: Do you think you'll graduate?

A: Yes.

Q: Do you have other thoughts about the future?

A: I'd like to be very well off. I'd like to go into hematology research. I'd like to get married and I'm not too sure about kids. If I do it will only be two and I'd like to live in New York City in a large apartment and I'd like to have my own practice. I hope I can combine my social life with my professional life. I hope I'm happy. I think if I continue and become a doctor, I will be happy.

Q: How did you become interested in hematology?

A: Over the summer I worked at Mt. Sinai as a volunteer in a lab where the doctor is a hematologist, she does research on rare blood diseases. I helped the technicians and I really enjoyed myself and what I was doing. I thought I would think about it once I got to college and planned my major.

Q: Have you thought of the things you might do to make all this happen?

A: First college. I realize it's a lot of years, but I want it. I'd like to go to Mt. Sinai for my internship after medical school.

Q: Do you think this will all happen?

A: Yes. I couldn't see myself doing anything else. I'm really interested in it and I'm a rather strong willed person. I think I can make it through the school years.

For these girls, as well as others in the effective user group, their sense of the future and conceptualization of their presents as related to something larger seemed to be linked with a desire for change and a motivation to actively participate in creating those changes. On a concrete level, change meant physical movement -- getting out of Hoboken -- and having something new and different in the future. As we have seen this was very different from many of the ineffective users, one of whom specifically said she was scared of and did not like change.

### Sexual Experiences

In talking about sex, many of the effective users described an initial hesitation which they usually treated with respect. This caution, or taking good care of themselves, rather than giving in to external pressures or demands seemed eventually to evolve into the potential for greater openness, an ability and desire to share and a sensitivity to their own satisfactions and pleasures.

It was not as if the effective users were without conflict or guilt about sex: but they seemed to engage in less denial and were more open to recognizing their conflicts, responding to them without the self-destructiveness or the self-annihilation of the ineffective users.

Joan, a 17-year-old white girl who had used various methods since her first sexual experience at age 15, was frank about her initial hesitation, but seemed to have a basic sense of self-respect which helped her not to close off.

Q: Do you remember the first time you had sex?  
Try to tell me what made you decide to do it then and not before then?

A: Before then I don't think I could have handled it. I just know I wasn't ready -- I guess mentally. I guess I thought sex was dirty and I guess I didn't care enough about him. But when I did have sex the first time, I knew -- it was Christmas Day and I knew it was going to happen. I guess a woman's intuition. I was so happy I cried. I never felt closer to anybody before in my life.

Q: There must be some reasons why you have sex now. Can you tell me why you have it and what you get out of it?

A: Because of the pleasure too, but I'm not much with words and the guy I'm going with now is very quiet and he can't say what's on his mind. It's just our form of expression. I feel so much for him, it's hard to explain, but I can't explain my feelings but I love being with him, I love being near him, his ideas I like, the things we've shared -- I can't use words.

Q: What is happening inside you before sex? Like what kinds of talks, discussion, or arguments do you have with your inner self before having sex?

A: I feel maybe, it's not regret, like I should have waited for marriage. Let's say this doesn't work out, but then again if I find out in time then I'm happy. It's hard to explain. Sometimes I say No, maybe we shouldn't and because I was on the pill the fear of pregnancy vanished. Going on the pill is good, it gives you more freedom, but then maybe you don't think twice. People can be out to hurt you and this is why I learn everything about a person before I get involved. I don't like to be hurt, to be made a fool of, or people getting the better of me. I try to take an outside view. What could he be thinking, what does he want out of it? Is it because of his feelings or does he just want sex? If he just wants a body then I don't want anything to do with him. I hold sex in too much esteem to use it as just a form of pleasure.

Ingrid, a 15-year-old white girl, who first had sexual intercourse several months prior to this research, was candid about the affect peer sexual norms had on her. In owning up to her own role and responsibility in her sexual decision making she found her sexual experiences satisfying and in this way differed from many of the ineffective users who appeared to respond to peer norms and pressures in a "mindless" manner. She began by describing her first sexual experience:

My mother was away on vacation and I had been getting these feelings. Nobody told me anything like go ahead. It was myself. It was a good opportunity, we had the house. My boyfriend didn't pressure me. If I didn't want to I didn't have to, like I was curious myself. A lot of girls my age were doing it and I was curious why. Like with smoking cigarettes, I used to ask people why they smoked so I tried and didn't like it and quit. With sex, I like it.

Q: There must be reasons why you have sex now. Can you tell me why you have it and what you get out of it?

A: For one thing, my boyfriends likes it, and I do too. We both get pleasure out of it. We're both careful, super-careful. We like it so why not, we both enjoy it.

Q: What about after sex? Try to think back to how you usually feel after you've had intercourse.

A: Like if we just shared and said something very personal. During intercourse I feel like I'm loved or needed. Sharing a personal part of me with a person I care a lot for. I'm happy and glad for those few moments both of us seem completely happy.

### Procreational Motives

The emerging sense of self and even more the understanding of being involved in a growth process -- of having "tasks" to struggle with and grow from -- resonated in the effective users' view of their own and others' procreation.

Debbie, an 18-year-old white girl, who came to the clinic prior to her first sexual experience, made it clear that she did not see herself as prepared for childbearing and she took a harsh view of others her own age.

Q: We all have feelings when we see someone who is pregnant. Can you tell me some of the specific thoughts and feelings you have when you hear about someone your age who is pregnant?

A: Depends. If it is a girl my age then I always feel bad for her. I immediately think -- Oh, she can't be pregnant. I know that if I were pregnant I would just die. Like it's awful. But if the people are married or not married and they want to have a child then I feel glad for them. If they want and have thought it through and can accept the responsibility then I think it's a good thing.

Q: Can you tell me a little bit more about how you feel when the person is your age?

A: They might end up getting married and I'm only 18 and life hasn't started for me yet, so I feel sorry for them. You ought to have a chance to go out and live for a time before getting married. . . . But for most girls they are not ready to have children so young. Some of them get pregnant and it's an accident. I don't hate that so much but it's the child, because I know if it was me I would feel resentful like it's tying me down. Usually, immediately it's a -- That's too bad -- reaction!

In response to the projective story about "Karen" who was pregnant,

Debbie shared further her thoughts and feelings:

I would think it's an accident because a lot of girls don't use contraception. They just think it's a waste of time, they just take their chances. I would say -- that's too bad, what's she going to do, is she going to give the child up for adoption, has she talked to her parents, because I think it's important to talk to your parents. Mostly I would just wonder what she's going to do. How her boyfriend feels, if she has a boyfriend. She probably thought it would never happen to her. It's a kind of common occurrence now, not a hush-hush thing like it used to be. You kind of accept that someone in your class is going to get pregnant. It's just a question of who it will be.

Allison, an 18-year-old white girl, who in talking about her future said she was not sure whether she ever wanted children, saw child-bearing as intimately connected with one's personal development, describing her feelings about pregnant women as follows:

Depends on how old you are. When I see someone who is my own age and pregnant I feel sorry for them. Plus I think about how they haven't begun to live themselves and they have another life that they have to worry about. When I see someone who looks fairly complete as a person and they're happy about it and their face looks happy, then I'm happy for them.

Q: What things go through your mind when you see a friend with a child?

A: I saw Star on the avenue with her baby and I had this feeling that she was treating it like a doll. It was just like -- look at the baby and I don't really think she thought about it. I think a child should be planned, I don't think it should just happen.

Q: Can you share with me how you feel about Karen in the story I just read?

A: I think it's a sin. A sin because Karen is only 17 and how could she possibly be ready to have a child? I feel that at 18 you're still a child yourself. You have a lot to learn about yourself. To bring a baby into the world and not be sure of yourself, you're just stretching out too much and creating too much responsibility.

Kim, a 16-year-old Puerto Rican girl, who was an effective user, was closer to pregnancy herself than the two previous girls saying -- "I was going to get pregnant and then I said 'No.'" While she seemed drawn towards pregnancy, she did not become overwhelmed by jealousy of others and rather than denying her wishes, she carefully examined

her impulse to have a child and was then able to open herself to the experiences of others from whom she could learn. Speaking of her friends who had children, she said:

They become pregnant because they see everyone else pregnant. They say things like -- "Oh, I wish I had a baby." They think it's easy to have a baby. They say -- "No, I can support it, welfare can support it." I don't want no welfare supporting my kid. I want to support my kid myself. I see a lot of young kids pregnant. They see older women pregnant and they think it's easy to have a kid.

Q: Can you share the thoughts and feelings you have when you see someone your age who is pregnant?

A: I say, yeah, it's nice to have a kid if you have money. If you don't have money, why have a kid. I feel sorry for them. I hope I'll never be that way. I was going to get pregnant and then I said -- "No, I have no money, I have no home, when my kid grows up I don't want my kid to be living in my mother's home." I want my kid when he grows up to have anything he wants and I want to give him anything he wants.

Kim elaborated further upon her feelings when she was with her friends with children:

I have lots of friends with children. I tell them they should think about it. They say -- "Why did I have this kid?" and I tell them -- they should have thought about it before they had the kid. They always complain. When I have a kid I want to be ready and not saying all of that and hitting them. If you have a kid you ought to be able to take care of it, not hitting it all the time. I was walking with my mother. A little kid kept saying . . . and then the mother hit it real hard. My mother said -- "I hate mothers who hit their kids real hard." My mother doesn't hit me, she never did, she used to punish me but she never hit me.

She said you should try to understand a kid and that's why she took a course in child psychology. She has a good book at home about the child from 3 to 16. It's real good. A lot of women leave their kids abandoned. When I see kids who are abused . . .

It was not as if Kim or the other effective users did not share feelings for children or wishes to become pregnant with the ineffective users, but these feelings seemed to represent one aspect of their lives and thus seemed less uncontrollable.

### Summary

On the most simple level, the girls who were the ineffective users told us that they felt like they had very little in life: at the extreme, nothing to look forward to and even no sense or hope of a tomorrow, and they took a stance of passively responding to and fulfilling the demands, pressures and sometimes the pleasures of others in their day-to-day functioning. Pregnancy then represented something not quite accurately described as life, fulfillment or developmentally challenging; but the possibility of having something -- anything, and often it did seem like a thing. We could hypothesize, as others have done, that babies or pregnancy was their attempt to recreate in a new way their childhood, or to make up for their own deprivation; and that a narcissistic

investment in their children provided them with new hope or a "new lease on life." However, in this population, it appeared that many of the girls were so detached from or turned off to their own bodies, their sexuality and a sense of reaching out into life, that there was little they even expected to live through their children. In fact, pregnancy and childbearing seemed to reflect an attempt to live "in harmony" with their peers. In summary, their ineffective contraceptive use seemed to imply a philosophy of life: the accidental, uncontrollable and inevitable aspects of everyone's humanness embody and structure a general attitude of futility and fatedness which seems to negate "living" as a developmental-creative-ongoing process, in turn, creating a "picture" of children as somewhat unreal, as closer to "toys."

In contrast, the effective users told us about an interest and excitement about experiencing the richness of growing up with a relative openness to difficulties and conflicts and yet an ability and desire to not become "bogged down." In talking about themselves they seemed to have a sense of control over their lives and reflectiveness which allowed them to examine their role in their presents and the potential for their futures. Childbearing was seen as another challenge, as something quite special, which they experienced many of their peers as abusing. In fact, they responded to pregnancy and childbearing much as they did to their sexual activity, as a process in which their feelings

and needs were quite important. In summary, their effective contraceptive use seemed to imply their philosophy of life: humanness, the excitement, pain and conflicts of the individual and the individual in relationship to others, must be sensed both internally and externally and opened to as part of a process in which the individual may not have ultimate control but can pay careful attention to the possibilities for control.

## CONCLUSION

The introduction began with a quote from Freud (1898) in which he recommended contraception as a necessity if procreation were to be a "voluntary and intentional act" and as a means of freeing procreation "from its entanglement with an indispensable satisfaction of a natural desire." Modern contraceptive methods contain the potential for freeing men and women from unwanted pregnancy and unwanted children. However, in the most general terms, this research has shown that the use of contraception is very much entangled with not only sexual feelings and behavior but many other aspects of living. The availability of effective methods of contraception is an essential part of the process of controlling and planning procreation, but responding to this availability involves a complex interaction of the personal, interpersonal and other factors which are not within the scientific control of chemical or mechanical interventions.

## Appendix 1

## SUPPLEMENTARY CONTRACEPTIVE HISTORY

Name \_\_\_\_\_ Patient # \_\_\_\_\_  
 Birth Date \_\_\_\_\_ Age at interview \_\_\_\_\_  
 Present year in school \_\_\_\_\_ School: Public Private

Religion \_\_\_\_\_  
 Church Attendance: Weekly Monthly 1-2/year Never  
 Strength of Belief: Strong Moderate Weak

Ethnic: White Black Puerto Rican

First Sexual Intercourse: \_\_\_\_\_ (If raped, 1st "by choice")  
 month/year

Birth Control: YES NO  
 Type:

If first S.I. more than one year prior to interview:

Frequency since 1st S.I.: 1 or more/week 1-2/month 1-6/year  
 Birth Control: Never Sometimes Always  
 Type(s):

Detailed History of last year:

Frequency: 1 or more/week 1-2/month 1-6/year  
 Birth Control: Never Sometimes Always  
 Type(s)  
 Comments:

History of last month:

Frequency:  
 Birth Control: Never Sometimes Always  
 Type(s):  
 Reasons for non-use: Medical Forgot Not having S.I.  
 Other (describe):

Pregnancy History:

Date of pregnancy:

# of living children:

Abortion:

Was the pregnancy a surprise?                      Planned?

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When did she first hear that there are  
ways of preventing pregnancy? \_\_\_\_\_

Did she know where to get birth control? \_\_\_\_\_

When did she first hear about the clinic? \_\_\_\_\_

Date of first clinic visit: \_\_\_\_\_

History of medical visits, methods prescribed, and use  
since first visit:

User            Non-User:    Never Pregnant    Pregnancy

Date \_\_\_\_\_ R.N. \_\_\_\_\_

Appendix II  
QUESTIONNAIRE

1. Are you in school now?  
Grade?  
Can you tell me something about how you are doing in school and how you like it?  
Are you planning to graduate from high school?  
Why? (if parents mentioned or focused on): What are your reasons?  
Do you think you will graduate? (if NO, Please explain.)
2. Have you any thoughts about the future? What are they?  
(probe: dreams, fantasies)  
Have you thought of the things you might do to make this happen?
3. Have you thought about what you will be doing in five years?  
(You're how old now, let's say when you're \_\_\_\_\_?)  
What would you like to be doing then?  
Do you think you will accomplish these goals?  
(if YES): Have you thought of some of the things you might do to increase the chances of this happening?  
(if NO): What are the sorts of things that will prevent it from happening?

-----

Now I'd like to ask you something about how you spend your time and about your friends.

4. When you are at home, are you alone, or are you with somebody?  
What kinds of things do you do?  
About how much of your time is spent this way?
5. When you are not at home, who do you spend your time with?  
What do you do?

6. There are a lot of girls your age or near your age in school and out of school. What was there about \_\_\_\_\_, \_\_\_\_\_ (friends' names) that made you pick them as friends, and not some of the others?  
 How are they different from the girls who you didn't choose as friends?  
 In what ways are \_\_\_\_\_, \_\_\_\_\_, the same as you?  
 In what ways are they different from you?  
 What are they doing now? (i. e., school)
7. What kinds of things do you talk to them about?  
 Do you ever talk about sex?
8. Have your friends had intercourse?  
 How do you know?  
 Do you know if they use contraception?
9. Have any of your friends been pregnant?  
 (if NO): Do you know any girls your age who have been pregnant?  
 What do you think caused them to become pregnant, besides the fact that they were having intercourse?
10. We all have feelings when we see someone who is pregnant.  
 Can you tell me some of the specific feelings and thoughts that you had when you heard your friend was pregnant?  
 How did you feel when you were with her?
11. Have any of your friends had children?  
 (if NO): Do you know anyone about your age with children?  
 What kinds of things go through your mind when you see her with her baby?
12. There's a girl named \_\_\_\_\_ (subject's name), talking to her friend \_\_\_\_\_. \_\_\_\_\_ (friend) has just told her that another friend of theirs named Karen is pregnant. \_\_\_\_\_ (subject's name) tells her friend why she thinks Karen became pregnant and how she feels about it. They are very close so she is really able to tell her everything she thinks about it. What does she say?
-

Ease into a discussion about sex. Begin with something like:  
Do you have a boyfriend? Do you have sexual intercourse.

(Note: non-verbal)

13. Do you remember the first time you had sex? Try to tell me what made you decide to do it then and not before then?
14. There must be some reasons why you have sex now. Can you tell me why you have it, what you get out of it?
15. What is happening inside of you before you have sex? Like what kinds of talks, discussions, or arguments do you have with your inner self before having sex?
16. What about after sex? Try to think back to how you usually feel after you've had intercourse. Can you share with me some of those thoughts and feelings.
17. Do you feel embarrassed about being naked in front of your boyfriend?  
Do you prefer to turn the lights off before getting undressed?
18. When you have sex, do you ever feel like it's not really you, like you're not really there?
19. You know that before intercourse is over the guy has liquid, called semen, shoot out of his penis. Do you have a reaction in your body before intercourse is over?  
What reaction do you have?
20. There's a girl named \_\_\_\_\_ (subject's name) talking to \_\_\_\_\_ (her best friend). \_\_\_\_\_ (subject's name) is describing what she really feels when she has sex with her boyfriend. Can you share with me what she says about how she really feels?

-----  
(This section recorded on Code Sheet):

21. I am going to read you some statements and you tell me for each one, whether you agree or disagree and how strongly you feel about it. The four choices are:

Strongly agree  
 Mildly agree  
 Mildly disagree  
 Strongly disagree

Answer them as they apply to you. There are no right or wrong answers. They have to do with the way you feel.

- a - When you make plans, you are almost certain that you can make them work.
- b - Sometimes you feel like you don't have enough control over the direction your life is taking.
- c - People are born either to succeed or to fail, so they might as well accept whatever happens to them.
- d - Becoming a success is a matter of hard work; luck has little or nothing to do with it.
- e - Many times you feel that you have little influence over the things that happen to you.

22. Some people believe that God or Fate determines what happens to them in life. Other people believe that they have it within their power to influence what happens. I'm going to read you some things that happen to people and I would like you to tell me whether you believe that what happens to you, in each of these situations, is controlled mostly by God and Fate or is influenced mostly by your own efforts and decisions. The two choices are:

God and Fate  
 Me

- a - Who will be the father of your children.
- b - Which person you are going to marry.
- c - How many children you will have.
- d - Whether you do well in school or do poorly.
- e - Whether you get sick or stay healthy.
- f - Whether you have a lot of friends or a lot of enemies.
- g - How, when, and where you are going to die.
- h - When you become pregnant.

23. Now I am going to read you some questions which have to do with your usual ways of feeling and doing things. There are no right or wrong answers. The four choices are:

Very True  
A little True  
A little False  
Very False

- a - I can imagine myself five years older than I am now.
- b - I avoid people who are unpredictable.
- c - I know pretty well what I will be doing in a few years time.
- d - I like to organize what I do primarily around the plans and desires of my family and good friends.
- e - I have always lived according to a pretty definite plan.
- f - My plans are often made independent of what the people closest to me want.
- g - The future seems unclear to me.
- h - I have made general plans for most of my future life.
- i - When I am unsure of what to do, I will often just wait and see what works out.
- j - I count on being helped by good fortune.
- k - When I think about myself a few years from now, everything seems fuzzy.
- l - I have always had a hard time making plans for the future.

## Appendix III

## QUESTIONNAIRE RATING SCALES

FUTURE AND PLANNING ORIENTATION

I: Future awareness: Rate the extent to which the girl formulates the future, expressed through specific goals, and wishes.

1	2	3	4	5
LOW				HIGH
Future unformulated				

II: Future related to planning: Rate the extent to which the goals and wishes expressed about the future bear a logical relation and connection to what is being done in the present and what steps are elaborated for the intervening years.

1	2	3	4	5
LOW				HIGH
Absence of elaboration and connection				

SEXUAL ORIENTATION

III: Sexual conflict: Rate the extent to which the girl seems to feel guilt, embarrassment, denial and pulls toward not engaging in sexual intercourse.

1	2	3	4	5
HIGH-				LOW-
Conflict				Conflict

IV: Sexual motivation: Rate the extent to which the girl appears to engage in sexual intercourse as a result of external pressures, such as boyfriend or peers, and not out of a sense of personal

choice in contrast to participation which seems like a choice, is personally desired and is based on internal needs such as emotional and physical or sensual desires.

1	2	3	4	5
EXTERNAL-			INTERNAL	
Low choice				

V: Sexual experience: Rate the extent to which the girls seems to enjoy the actual sexual experience and to experience herself as involved in both the physical and emotional aspects of her sexual experience.

1	2	3	4	5
LOW -			HIGH	
Sexual satisfaction				

#### PROCREATIONAL CONSTELLATION

VI: Personal procreational motives: Rate the extent to which the girl seems to be interested in having children and pulled towards pregnancy, expressed through jealousy of peers, direct expressions of wishes for pregnancy or children in the present, and general feelings and attitudes in relation to peers who have been pregnant and who have children.

1	2	3	4	5
STRONG pulls			WEAK	

VII: Procreational among peers: Rate the extent to which the girl is involved in a peer culture in which procreation seems to be the norm, expressed through general awareness of peers who have been pregnant and/or who have had children.

1	2	3	4	5
HIGH -			LOW	
Procreation as Norm				

**VIII: Identification with peer procreation:** Rate the extent to which the girl seems to identify with peers and their procreational patterns, in contrast to distinguishing herself from procreational patterns and portraying a sense of herself as separate and autonomous.

1	2	3	4	5
HIGH-			LOW	
Identification with peer procreation				

If peer procreation (Rating VIII) is low, and the girl is identified with this pattern, the rating in IX would also be low. A high rating here implied that the girl is identified with a peer culture in which pregnancy and childrearing are the norm.

#### INTERNAL-EXTERNAL CONTROL

**IX: Internal-External Control:** Rate the extent to which the girl seems to make plans, formulate goals, and make decisions out of a sense that her own activity will affect what happens to her in contrast to not being able to formulate plans, decisions, etc. and/or what decisions she makes and activities she engages in are determined primarily by forces in her environment.

1	2	3	4	5
EXTERNAL			INTERNAL	

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