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1978

THE INFLUENCE OF OTHERS ON TEENAGERS' USE OF BIRTH CONTROL

by

JERRY CAHN

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in Psychology in partial fulfillment of the re-
quirements for the degree of Doctor of Philosophy,
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1978

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

THE INFLUENCE OF OTHERS ON TEENAGERS' USE OF BIRTH CONTROL

by

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The social systems paradigm has been used to understand how people are influenced by their social environment. While first used to understand how service institutions can intervene in people's lives, it has recently been used to understand how people help one another.

Just as formal intervention systems do not operate in a vacuum, a person may receive assistance from formal and/or informal sources of influence. A person's social environment can therefore be viewed as a "potential social support system" in which a large number of both types of sources can interact with a person, though only some will actually influence him/her. The sources are likely to influence the person in different ways depending, in part, on the kinds of technical and supportive information, and behavioral support they provide. When the issue with which the person is confronted is complex and/or controversial, the nature of the information and support are most likely to vary. It is hypothesized that

if a person is influenced by a sufficient amount of information and behavioral support to act in a certain manner, then the person will be able to do so.

This study uses this paradigm to understand teenagers' ability to avoid unwanted pregnancies. It focuses on two sets of teenagers, those aborting their first unwanted pregnancy and those seeking contraception to avoid one, and teenagers having a repeat abortion and those who have been using medically prescribed methods effectively to avoid an unwanted pregnancy. It is hypothesized that each group of Aborters will report receiving less influential information and behavioral support conducive to effective contraceptive use than will its comparison group of Contraceptors.

Data were collected in three phases from both groups of Aborters and Contraceptors while they received services at Planned Parenthood of New York City clinics. The 592 teenagers completed a self-administered questionnaire about attitudes and knowledge concerning birth control; clinic counselors collected data about contraceptive use during the routine intake interview; after receiving their medical service, special interviewers collected data on the woman's relationship to her potential social support system.

The results support the hypotheses; new contraceptors as compared to first aborters, and effective contraceptors as compared to repeat aborters, reported receiving a

greater net amount of influential information conducive to effective contraceptive use from their social system as a whole. This was mainly due to the greater conducive influence of informal sources. Contraceptors also reported receiving a greater amount of behavioral support from their partner and mother. The discussion focuses on the implications of this paradigm for designing effective intervention strategies.

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It is only appropriate that the author of a study on the social support other people received in relation to one area of their lives, acknowledge at least some of the people who provided him with technical and emotional support to conduct this dissertation.

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THE INFLUENCE OF OTHERS ON TEENAGERS' USE OF BIRTH CONTROL

I. INTRODUCTION

The social system paradigm emphasizes that the individual's behavior is to a large degree "a function of the current environmental forces impinging on the individual... with the persons considered as units of the system, above and beyond their individual characteristics" (Murrell, 1974, pg. 9; Lewin, 1951).

This approach received increasing attention during the 1960s as professionals concerned with achieving the goals of primary and secondary prevention of mental disorders adopted it (Caplan, 1974; Zax and Spector, 1974). The community mental health movement recognized the need to understand how the person interacts with his/her significant others while treating clients in the formal intervention system's facility and when working with the community outside the facility.

More recently, this approach has been used to account for the observation that people are able to help one another without the need for formal intervention systems. Focusing on the ability of people to provide others with emotional support, studies have found that people who were better able to cope or feel comfortable during times of tension and crisis, in situations ranging from school examinations to bereavement, were also more likely to report receiving social support from other people (Maddison and Walker, 1967; Caplan, 1974; Murrell, 1974; Gelinos, 1975; Tolsdorf, 1976; Sodano

and Gabbert, 1975; Walker, 1975). When friends and/or relatives form an "enduring pattern of continuous or intermittent ties that play a significant part in maintaining the psychological and physical integrity of the individual over time" they have been characterized as "natural support systems" (Gottlieb, 1977; Hirsch, 1977). When strangers get together to help one another they have been referred to as "self help groups" (Gardner and Reisman, 1977).

While the studies have shown that people can provide others with emotional support, they often have not conceptualized the dynamics by which a person is influenced to cope with a variety of social problems, especially those also involving technical skills. "Social support" is not a unitary phenomenon. As Caplan (1974) notes, people do more than just help an individual mobilize psychological resources to master his/her emotional bindings; they also can share the person's tasks and/or provide him/her with extra "supplies", such as the technical and supportive information needed to handle specific situations. Further, those who help a person cope with a situation need not be "significant others" who are psychologically close to the person (Mead, 1934). They also can be less immediate relatives, friends, acquaintances or strangers. Moreover, the ways in which the person is influenced by the source's inputs do not necessarily have to be supportive of the individual's ability to act in his/her own best interest.

While the earlier research focused on the role of the formal intervention service systems at the exclusion of the

role of people's ability to help one another, the recent research tends to commit a parallel error -- focusing on the role of other people while ignoring the role of formal sources. A more appropriate approach would include both types of sources and the different types of influence they can have by providing information and supporting the person's actions. Viewing the social system as a "structure of other people to whom one turns for help and to whom one provides help" (Kahn, 1975), the question that presents itself is: what determines which of the sources actually influence a person and how they do so?

This study attempts to identify some of the factors associated with the process by which a person is influenced by her/his social system. It also seeks to determine whether differences in people's behaviors in relation to a specific issue are related to how they interact with potential sources of influence.

A. Communications within the social system

One way of understanding the process by which a person is influenced by others is to view the system as a network of communications channels in which one can observe, as Lasswell (1944) phrased it, "who says what to whom with what effect."

1. "The two-step flow" hypothesis

Sociologists laid the foundation for this approach when they began studying the power of the mass media to influence the voting patterns of the American electorate. They found that the mass media did not directly affect most voters;

frequently people were more important than the mass media in influencing voting decisions. Analysis of the flow of personal influence led to the development of the "two step flow" of communication hypothesis: some people who are relatively more exposed to the mass media pass on what they hear or read to those who are less exposed. People who were more interested in the election and identified themselves as influencing others' voting decisions were labelled "opinion leaders."

Since then both basic and applied researchers, have tested the validity of the hypothesis, using different matters, methodologies, and operational definitions. They tried to identify the characteristics associated with opinion leaders and the relative influence of the media and interpersonal relations. Issues that have been studied include people's short term decisions concerning fashions, movie going, public affairs, and marketing (Katz and Lazarsfeld, 1955), and more significant decisions to adopt innovations such as hybrid corn by farmers and drugs by doctors (Ryan and Gross, 1950; Coleman, et. al., 1957). Opinion leaders were often operationalized as people identifying themselves as more likely to advise others on a topic and/or recently giving information to others (Katz and Lazarsfeld, 1955), as people identified as influencing the respondent (Coleman, et. al., 1957), and as people most often diffusing information (Palmore, 1966; Placek, 1974). (Also see Lazarsfeld, 1948; Merton, 1949; Eisenstadt, 1952; Klapper, 1960; Schramm and

Roberts, 1971; Rogers, 1962).

The results indicated that the "two step flow" hypothesis did not adequately describe the communication flow. Influentials did not always differ in terms of the amount of exposure to mass media or even the attention they gave it. Often opinion leaders reported they, too, were influenced by other people. In fact, the chains of influence varied in length depending on the topic. Accordingly, Rogers and Shoemaker (1971) described the network as "any number of individuals in a system, starting with a source person and sequentially continuing through all related individuals who are direct or indirect receivers." These opinion leaders, therefore, were either gate-keepers who admitted the information to the network of communication or transmitters who passed the information from the gatekeeper to others. Katz and Lazarsfeld observed that these sources could do more than just channel mass media transmissions; they could reinforce or counteract the mass media messages, and they could provide social support by serving as anchorage points for individual attitudes and values.

Further, opinion leadership was found not to be a trait which some people had and others lacked. Rather, within the everyday give and take of personal relations different people played the key communications role for different topics. What distinguished people with the greatest potential to influence others in relation to the studied topic, was that they generally: (a) personified the relevant value (e.g., young women for fashions), (b) were knowledgeable and/or

experienced with the value, and (c) were strategically located within and/or outside one's group (Katz, 1957).

2. Implications for interventions

Understanding that all interpersonal relationships are potential networks of communication, with certain people more likely to influence others, social scientists have provided governmental and private intervention agencies interested in influencing people with important advice.

Cernada and Crawford (1973) observed that

A mass campaign that takes advantage of the existing group structure by utilizing respected reference person, indigenous opinion leaders and groups meeting may increase its effectiveness.

Maloney and Schonfield (1973) also observed that

Since people's opinions and attitudes are greatly influenced by group norms and values and word of mouth corroborations or refutations or information carried by the media, it is essential to shape messages in accord with the relevant group norm as well as individual attitudes. For almost any innovation, one may find particularly influential opinion leaders within neighborhoods, communities, work groups, or other primary groups. Special attention to their interests is likely to make a considerable difference for the...persuasion efforts. (pg. 201)

These recommendations, however, underestimate the importance of two important factors. First, a person can obtain information and be influenced by a variety of sources and not just "opinion leaders." Second, sources' information about a topic is likely to vary in terms of accuracy, completeness and focus. In fact, as Rogers (1973a) points out, while some people may favor the adoption of an innovation, others may not. As a result, formal intervention systems may find the advice less than completely

effective in influencing people's behavior.

Coleman, et. al.'s study (1957) on doctor's adoption of a drug illustrates the importance of these factors. They found that most doctors cited other doctors as influencing their actual adoption, with earlier adopters being those doctors who were integrated into the community. However, most doctors admitted first hearing about the drug from a salesman. Rogers' (1973b) theory of the process by which an innovation is adopted may explain what happened. His theory involves five stages: (1) awareness (2) information gathering (3) trial use and evaluation (4) adoption, and (5) continued use. But doctors and salesmen may have provided similar information with the cumulative effects leading to the adoption. Alternatively, and more likely, the two sources provided different types of information, producing the different effects on the person. The salesmen's more technical information may have been related to the initial stage(s), while colleagues' experiential information and/or social support to risk using the drug triggered the third and fourth stages.

B. The "potential social support system"

From an individual's perspective, interpersonal relations and the media do not necessarily compete for a person's attention, as the opinion leader literature implies. Similarly, "natural support systems" and formal intervention systems do not necessarily compete for people's attention. A more appropriate conceptualization of the person's social system would be to view it as consisting of an indefinite

number of sources, both formal and informal, who have the potential to influence the person's behavior in many areas, especially those which he/she defines as being in his/her best interests. These members of his/her "potential social support system" do not provide a person with a single form of support. They may provide technical and/or emotionally supportive information to make decisions as well as behavioral support to act out those decisions. On the other hand, they may influence the person in ways adverse to the person's own best interest. The critical question is whether the person obtains a sufficient amount of technical and supportive information and behavioral support to act in his/her own best interest.

1. Sources of influence

In relation to any topic, potential sources of influence differ in who they are, what they know, how accessible they are, what they communicate, and how they influence the focal person.

Sources of potential social support can be characterized as either formal or informal. Formal sources include service institutions designed to provide people with specific services, their outreach workers and their literature; general institutions (e.g. schools) who provide relevant services, and the media (e.g. television, radio, books and pamphlets). Informal sources include relatives, friends and acquaintances.

Sources who provide some type of technical or supportive information can be categorized as "active" sources because

they volunteer information, only when contacted. Passive sources will be sought if they are identified as relatively competent to provide the technical and supportive information and accessible (Hovland and Weiss, 1957). Accessibility involves not only physical availability, but also has a psychological component -- whether the benefits of turning to the source outweigh any costs of doing so (Kogan and Wallach, 1964). This involves a weighing of the extent to which communication with the source satisfies or conflicts with other needs that the person has. For instance, embarrassment may restrict communications with passive sources. Formal sources predominantly serve in one role or the other: outreach workers, media and teachers are active sources, while hotlines and service providers are passive sources. Interpersonal relations, such as friends and relatives, are likely to play both roles.

A source's potential to influence a person is related to its relative competence and accessibility in relation to the issue (Hovland, Jones and Kelly, 1953), and the manner in which it interacts with the person. As the opinion leadership studies demonstrate, sources who are knowledgeable and/or experienced about a specific topic are more likely to influence a person in relation to it. Even if a source is not expert in an area, it is more likely to influence a person if it actively provides information or support, or is readily accessible as a resource. If an active source provides information considered sufficiently accurate and complete for making a decision, or behavioral or emotional

support to cope with a situation, the person may not seek out passive sources.. Earlier sources have an advantage since they are likely to shape the attitudinal structures with which the person views the situation. Thus, early active sources have the greatest potential to influence a person.

2. Formal and informal sources

The importance of these factors can be understood in regard to the relationship between formal and informal sources. Formal sources are likely to be more knowledgeable than informal sources, but are often less accessible. Human service providers, for instance, are often technically competent passive resources but they are less physically available, and often impose legal, financial or psychological barriers (e.g. embarrassment) on potential users. Informal sources are often more physically available, more accessible and more numerous. Thus, despite their possibly lesser competence, they have a greater potential to influence the person before, after and instead of the formal sources.

Further, the two types of sources may provide different types of information. While formal systems may be better qualified to provide competent technical information, many informal sources may be better able to cater to the person's special needs for emotionally supportive information. This is because human service providers have relatively brief and often structured interactions with the person while many informal sources are more familiar with the person's unique life situation. Therefore, if informal sources are relatively

knowledgeable and accessible to provide conducive information and support, they may be as significant or even more significant than the formal sources in determining the person's behavior.

3. Factors affecting source's influence

Social support or influence conducive to a specific set of actions can result from technical information about what to do, supportive information making the person feel comfortable about certain actions, and the behavioral support from a facilitative environment or others' sharing in the tasks. Sources' input may not always be conducive to the person's ability to take a specific set of actions. They may have no influence or even adversely influence the person. For instance, a person may be influenced to initiate or not initiate the use of an innovation and to continue or terminate its use.

The nature of the influence that a source's information can have is related to the content of the message, the context in which it is offered and the context in which it is received (Klapper, 1970).

The nature of the technical and supportive information offered by a source depends on what the source knows about the topic, what he/she thinks the receiver should be told and the constraints on the communication medium. While formal sources communicate through the spoken and written word, informal sources also provide information by their behaviors. A message may vary in terms of accuracy, completeness and focus. The more complex the issue, the more

likely the nature of the message will vary; it is more likely to focus on only a selected number of issues, to be incomplete or to be inaccurate. Its evaluative tone may also vary; it may suggest the direct and indirect advantages or disadvantages of the actions in question (Rogers, 1973; Schramm and Roberts, 1971).

Whether a source's information positively or adversely affects the person, or has no influence at all depends not only on the nature of the message, but also the context in which it is presented (Hovland and Weiss, 1957). Two factors are the receiver's assessment of the source's credibility and trustworthiness and the receiver's need for information and support. Potentially influential sources may have no effect if the material is not relevant. Also, prior information to which the person may have already been exposed may have created a knowledge and attitude structure to which the new inputs are added. They may increase or decrease a person's interest or willingness to act on the relevant issue. If it adds nothing new, the information may have no impact at all.

Some sources, often referred to as "significant others" (Mead, 1934) because of their psychological relationship to the person, can influence a person not only by providing technical and supportive information but also provide emotional and behavioral support for the relevant actions. By favoring or opposing a person's proposed actions, such as the use of an innovation, they can directly affect whether and the manner in which the person acts in relation to the

behavior and the use of other sources.

4. Being influenced by one's system

The "potential social support system" paradigm acknowledges that a large, indefinite number of both formal and informal sources have the potential to influence a person with respect to a specific topic. It also acknowledges that the nature of every source's influence can vary, due to differences in the content of the information and/or support provided. It suggests that differences in how people interact with potential sources of influence will be related to differences in their behaviors.

The critical issue for the person isn't necessarily who her/his sources are -- whether they are informal or formal -- but whether the person is able to obtain sufficient influential information and behavioral support on the given topic to enable the person to carry out actions he/she defines as being in his/her best interests. Lewin's field theory, viewed each individual as existing at a particular place in an interpersonal field of relationships with every other person in that field having a cumulative effect on him/her (Pattison, 1976). In terms of the potential social support system, this means that the identity of the sources who actually influence a person will depend on the person's assessment of the relative accessibility of all sources, the value of their inputs and the nature of their interaction -- active or passive. Sources can influence a person not only by providing information and support conducive or adverse to a certain course of action, but also by being able to influence the person

and not doing so.

If a source who could actively provide useful information does not do so, or a passive source is not identified as such or is not accessible (e.g. the costs of using it is too high) then the person is forced to rely on whatever inputs are available from other sources.

An optimal social support system in relation to a person's ability to effectively act on his/her self-defined best interests, includes a sufficient number of active sources who are knowledgeable and provide appropriate information and support, and a sufficient number of competent, passive sources who are fully accessible to do the same.

Lesser systems can take various forms. Active sources may provide technical information conducive to an action but it may be incomplete, inaccurate or irrelevant and therefore not have a positive influence on a person. They may provide no assistance at all or provide information inducing a person to act against his/her best interests. In all cases, it may directly influence the person not to act in his/her own behalf or indirectly do so by inducing the person not to seek out other information and emotional support. The same is true for passive sources. In addition, passive sources, especially if knowledgeable, may not be identified as such or be perceived as accessible. Finally, those significant others who can affect the person's actual behaviors may restrict his/her ability to act on the information available or obtain additional needed information.

It can be hypothesized that an individual's ability to act in his/her self-defined best interest is related to the cumulative informational and behavioral influence received from members of his/her potential social support system in relation to the topic. If a person receives a sufficient amount of technical and supportive information conducive to acting in one's own behalf and behavioral support to do so, then the person is likely to effectively control his/her behavior. If the person does not obtain sufficient conducive influence, or is adversely influenced by the available information, and receives no support or is actually restricted in one's actions, then it is likely that the person will not effectively control his/her own behavior.

C. Applying the paradigm to the use of innovations

Since the paradigm recognizes as important some of the characteristics which distinguish between formal and informal sources, this approach may be especially useful to account for people's actions which usually involve the use of services provided by formal intervention systems. Specifically, it may account for why some people are helped by institutional service providers while others are not. This can most easily be seen in relation to the process by which a person adopts and maintains the use of innovations.

To adopt an innovation, a person initially needs to be aware of its existence, have good reasons for using it, know where to obtain it and receive emotional and behavioral

support to do so. This information and support to act upon it is provided by formal sources such as an outreach worker or the media, and often more likely by informal sources such as a friend or relative. Indeed, McKinlay (1973) has pointed to the role of informal sources as a "referral network" to formal intervention systems. Lack of this information or the presence of information antagonistic to its use, and lack of behavioral support conducive to its use or limitations on actual use, will inhibit adoption.

The service provider generally offers the person who seeks to adopt an innovation with the information needed to adopt and use it. However, adoption doesn't guarantee maintained use of an innovation. Its continued use is affected by the future absence or presence of information and support and support conducive to or antagonistic to its use. The service provider is only one of many sources who can provide this information; the person can obtain additional information from his/her own experiences, from active and passive informal sources, and/or other active and passive formal sources. Even though the service provider may be very knowledgeable, it may be less accessible because it is less physically available, less likely to be aware of the person's unique needs and/or presents adverse consequences if used. As a result, the person may rely on informal sources who, while less knowledgeable are more accessible. If no relatively knowledgeable source is accessible, the person may not obtain the needed support. Also, the nature

of the behavioral support provided by those closest to the person will influence whether the person continues to use or terminate the use of the innovation and the extent to which other sources for assistance are used.

Since both adoption and continued use of the innovation are affected by the nature of the influence available to the person, the critical issue is whether sources of competent information and behavioral support are accessible and being used. While human service providers are likely to be more knowledgeable than informal sources, the greater accessibility of the latter may mean that they are more likely to influence both adoption and continued use of the innovation. Thus, the influence of the formal intervention sources depends not only on their inputs, but also on the relative value of their actual and potential inputs in relation to those other sources.

Accordingly, it can be hypothesized that a person's ability to use an innovation effectively depends on the potential of all sources - both formal and informal - to provide needed and technical and supportive information and emotional and behavioral support. Difference in people's behaviors are expected to be related to differences in the nature of the influence received from either or both groups of sources.

In order to test parts of the hypothesis, and demonstrate its utility toward alleviating human problems, this study focuses on one such problem -- unwanted pregnancies among teenagers.

D. Teenagers' unwanted pregnancies

In 1976, approximately four million teenage women were sexually active, one million became pregnant. In New York City alone, over 35,000 teenagers became pregnant with more than half aborting their pregnancies. Their abortions constituted a third of all New York City abortions (Pakter, et. al., 1976).

Traditionally, researchers trying to help teenagers avert unwanted pregnancies focused on person-related variables. Psychoanalytic researchers focused on unconscious motivations underlying "unwanted" pregnancies (Devereux, 1960; Lehfelt, 1969). Sociologists and personality psychologists suggested that contraceptive "failures" were too impulsive, apathetic, present-oriented, fatalistic, and self-defeating to use sophisticated or medically prescribed contraceptive methods effectively (Rainwater, 1961; Furie, 1961; Furstenberg, et. al., 1969; Miller, 1973). As Devereux concluded, "the adequacy or inadequacy of contraceptive behavior is only marginally determined by rational determinants." These approaches, unfortunately, do not lend themselves to efficient intervention strategies.

Alternatively, some sociologists and family planners adopted an information processing or cognitive approach which shifted some of the responsibility to the family planning service system, where changes would be easier to implement (Jaffe and Polgar, 1968). They suggested that

unwanted pregnancies result from a lack of information and/or physical access to birth control. As Reiss (1967) put it, "while the presence of contraceptive information is not the major determinant of coitus, the absence of it is the major cause of premarital pregnancy."

Increased knowledge about, and access to, contraceptive methods have increased contraceptive use by women in general; however, the number of unwanted pregnancies among teenagers has not substantially declined (Jaffe and Cutright, 1977). Research studies indicate that unwanted pregnancies are occurring despite the fact that the teenagers know something about the existence of contraception and its availability (Nadelson, 1973; Fortney, Settlege, et. al., 1973). Moreover, despite the fact that women were exposed to contraceptive information and adopted contraceptive methods after an abortion, women are having repeat unwanted pregnancies (Furstenberg, et. al, 1972). In fact, the proportion of women having repeat unwanted pregnancies continues to increase; in New York City, almost one out of six teenage abortions in 1976 were repeat abortions (Cahn, 1977).

The "information availability" approach is unable to explain these unwanted pregnancies because it makes two incorrect assumptions. First, it assumes that only one type of information is available: information favorable to adopting and maintaining use of contraceptives. Second, it assumes that the information channels of family planning agencies (e.g. outreach workers, advertisements, and clinics'

staff and brochures) are the major, if not the only sources of influential information.

E. The use of contraception

A great deal of information and support is needed to provide a person with the necessary knowledge and attitudes to adopt contraception. A person must expect to become pregnant if no method is used, want to avoid a pregnancy and know enough about contraceptive methods to obtain one. The person must be aware of the existence of contraceptive methods, know how some of these methods can be obtained and know how the chosen one is to be used. She/he must also have favorable attitudes toward issues relating to the use of contraception in general and the chosen method in specific (e.g. willing to touch one's body, take chemicals, seek out a partner's cooperation), and prefer the use of contraception to having an abortion. In addition to information, the person needs a conducive environment for using the specific method. This includes favorable situational circumstances, such as being able to keep one's method readily available, and emotional and behavioral support for contraceptive activities from those most able to affect the behaviors: one's parents and partners.

Additional information and support often is also needed to maintain effective fertility control. Traditionally, family planning professionals have been concerned with getting women to adopt a contraceptive method. They have assumed that adoption indicated unconditionally high motivation to control one's fertility; in fact, the person

may be ambivalent toward fertility control in general and/or be committed only to the one method. They also believed she now had all the information necessary to maintain effective use, and that if additional information was needed, she would automatically return to the service provider. As Rogers (1962) has observed, however, continued use of an innovation is a separate stage. More important, informational needs may change and other sources or no source at all may meet these needs.

The situational circumstances and supportive conditions surrounding one's sexuality and use of contraception can change. Partners may change, as may the frequency and predictability of sexual intercourse. The person's attitudes toward becoming pregnant may change. Reasons for using a contraceptive may change: the person may experience difficulties using his/her method; and information about positive or negative features of available methods may come from other people's experiences. The person's ability to maintain effective use of contraception therefore, is related to the degree to which his/her knowledge about methods and attitudes toward using them allow the person to adapt to changing circumstances.

In sum, there are a variety of informational and support needs people have dependence on whether they are concerned with issues related to adoption of a first method or sustained use of some form of contraception. When sources discuss contraception, they may discuss its existence and purpose, the relative effectiveness of one

or more methods, how to use the method(s), and where method(s) can be obtained. Other issues include the relative risks of pregnancy if no method is used, and issues related to abortion -- what it is, the morality of having one, where to get one, and its side effects. Sources' comments about these issues are likely to vary in terms of accuracy, completeness and focus; they will also differ in terms of the extent to which they meet the person's needs and the context in which the information is presented. Depending on whether the technical and supportive information provided by a source is conducive to using contraception or antagonistic to its use (e.g. stresses the advantage of using methods or the disadvantages of methods, such as physical and social side effects) and the totality of information already received and available from sources, they can influence the person to adopt a contraceptive method and/or maintain effective use of methods. It can be expected that the types of information to which a person is exposed will influence the extent to which he/she will adopt contraceptives and sustain effective use of contraceptives to avoid one or more unwanted pregnancies.

F. Sources of information, support and influence

Who are the sources which can influence the teenager's use of contraception? Family planning professionals have traditionally focused almost exclusively on the influence of specialized formal birth control sources -- i.e., pro-

viders of medical services; their outreach workers, and pamphlets; school sex education classes and other formal channels such as media and books. Little attention has been given to the role of informal sources -- i.e. partners, parents, relatives, friends and acquaintances. From a potential social support system perspective, all can influence the person and therefore they must be considered individually and collectively.

1. Sources of informational influence

The formal sources of influence were developed to provide women with information needed to adopt and maintain use of contraception. Providers of family planning methods recognized the need to also provide people with technical and supportive information, including: how methods are used, how effective they are, and what side effects they have. Since availability of such services does not guarantee their use, ancillary and related sources were developed. Outreach workers and media advertisements were designed at least to make people aware of the existence, purpose and availability of contraceptive methods and services. Sex education classes were designed for similar purposes. Thus active, formal sources were created to help people initially use the service provider. Presumably, after adopting the method, the clinic would be a passive source for future information.

The information functions of these formal sources were essential in a world where no other sources of information existed. While discussion about sex may still be some-

what taboo, the level of discussion about contraception in recent years has increased to the point where informal sources provide people with more than just referral information (McKinlay, 1973; Reichelt and Werley, 1975). They not only provide "clinical" information about how to use methods, how effective they are and what side effects they have, but also "experiential" information about using the methods which is likely to be more supportive than technical. They can provide information about the existence, competence, and accessibility of other sources, including service providers. They may also provide information about their assessments of the quality of the services the provider offers -- including the extent to which services are confidential. Thus, informal sources not only can complement formal sources, but also can compete with formal sources by providing substantive information.

More important, informal sources can also influence the teenager after an initial method has been adopted. By providing new information and/or support about her current method or other methods they can help or hinder her ability to use the current method effectively. For instance, new information about side effects may discourage use of a contraceptive method; lack of knowledge about other methods and/or lack of support from a partner to use coital related methods may discourage switching to other methods if a person experienced problems with the pill.

Informal sources, overall, have a greater potential to

influence the person because they outnumber the formal sources. If they do or can provide technical information perceived as being relatively competent and are perceived as equally or more accessible than formal sources to provide such information, the informal sources may more significantly affect the person's behaviors. Their advantage is increased by the fact that they are more likely to be able to personalize their communications and provide emotional support to meet the individual's unique needs. Further, they often have more time than does a service provider within which to interact with the teenager.

Formal sources' capacity to provide competent information does not necessarily mean they will influence the person: the information may not be relevant or timely. Goldsmith, et. al. (1972) found sex education classes often provided information not relevant to obtaining and using medically prescribed methods. Since informal sources are more readily available to provide information and often actively do so, they may provide relevant information before the formal source does. For instance, Cahn (1977) found that nearly half of the teenage women seeking contraceptive methods from family planning clinics had decided which method they would adopt prior to entering the clinic. The cumulative effect of repeating information may not necessarily be greater than the effect the initial information had. In fact, repetition of information or provision of relatively inappropriate information may be considered

annoying, and discourage the person from turning to the source for future information. Finally, when significant others restrict the person's ability to act on information, this too may limit the formal source's influence.

In sum, effective interventions by formal sources will depend on the degree to which its activities are relevant and coordinated with the activities of the informal sources. To the extent that less competent sources, formal or informal, are influencing the teenager, intervention is necessary to remove barriers impeding access to more competent sources and to increase the ability of competent sources to provide appropriate assistance.

2. Limitations on access to competent sources

Optimally, all knowledgeable members of a person's potential social support system are highly accessible to help the teenager adopt contraception and maintain its use. In this way, she can always obtain needed technical or supportive information which will help or control her fertility. However, within every sphere of human activity some will be more knowledgeable, supportive and/or accessible than others. Regardless of their own competence, some will serve as active sources, others as passive sources, while still others will provide the person with no information at all. Unfortunately, contraceptive related communication is likely to be further restricted because of intense values some people have in this area.

First, as Smith (1972) has observed, there is a general

taboo against discussing topics related to sex:

The neutral language in which family planning is discussed scientifically and professionally should not let us forget we deal here with sex and the marriage bed around which surely are woven some of the strongest and least rational motives, the most intimate and private relationships and the firmest institutional norms and taboos known to man. (pg. 117)

Second, many adults oppose pre-marital sex. Believing that discussing birth control will encourage teenagers to initiate sexual activity, many adults, especially parents, withhold information or express their attitudes in a way which discourages the teenagers from turning to them.

Further, parental opposition to teenagers' sexual activity may also restrict access to other sources. Both formal and informal sources may have to be identified as able to provide confidential services or information before a teenager in this position will use these sources.

Other values may also restrict a person's communication. Some people may infer from a person's discussion of contraception that the person is not only sexually active, but also promiscuous. Also, for some people, the very idea of planful rationality in this sacred area counters the norms surrounding the behaviors (Luker, 1976).

If a teenage woman's access to the competent and/or supportive sources is limited, then she is likely to be forced to rely on less knowledgeable and supportive sources. For the teenager seeking to avoid a pregnancy, the lack of sufficient information and/or support may lead to a delay in the adoption of effective contraceptive methods and/or

the termination of the use of a method.

3. Sources of behavioral influence

Within the teenage woman's social support system, certain people are so closely related to her behaviors that they can provide a general level of emotional and behavioral support beyond that which their information per se provides.

As sex is a dyadic activity, the partner has the potential for maximal impact: he may support, take no position at all, or even oppose her use of one or more methods and thus affect her ability to control her fertility. He may help by using a male method of contraception or by providing behavioral and/or emotional support for her use of a method. If he supports the couple's use of contraception, she should be more likely to avoid an unwanted pregnancy. By taking no stand at all, he deprives her of a potential support, one which she would especially need if she has problems using her own regular method. By opposing the use of contraception, he can severely restrict her ability to protect herself, since coital related methods are eliminated as possible options.

For the teenager living with one or both parents, their attitudes toward her sexual activity can also influence her actual use of contraceptive methods. If they accept it, then she will be able to keep her methods at home and turn to them and other sources for information and support. If they are ambivalent, she may be reluctant to let them know she is sexually active and be restricted in her ability to keep methods at home. If they are opposed to her sexual

activity, she will be severely limited in her ability to use methods and sources of social support of medical services, who may reveal that she is sexually active.

G. Accounting for unwanted pregnancies

Viewing the teenage woman in terms of her potential social support system, it can be expected that the nature of the influence and behavioral support received is related to her ability to effectively avoid unwanted pregnancies. Within the woman's social system, not all of the potential sources will provide information and/or support; of those who do, their influence will vary both in degree and direction -- conducive to effective contraceptive use or not. It is hypothesized that if a woman receives a sufficient amount of technical and supportive information and behavioral support closest to her, then she is likely to avoid an unwanted pregnancy by effective use of contraception. Also, if a woman receives an insufficient amount of positive influence and social support and/or receives too much influence and support antagonistic to effective contraceptive use, she is likely to have an unwanted pregnancy. (See Chart I)

To test this general hypothesis, this study focuses on the adoption and continued use of medically prescribed contraceptive methods and their relationship to teenage women's avoidance of first and repeat unwanted pregnancies.

Previous studies have shown that many women, especially teenagers, having their first abortion used no medically

prescribed method prior to the pregnancy despite the fact that the majority did not want to become pregnant. Indeed, most adopted contraceptives after the abortion. (Furstenberg, 1971; Goldsmith, et. al., 1972; Oskamp, et. al., 1974; Cahn, 1975). Both teenagers having their first abortions and those coming to a clinic for a medically prescribed contraceptive method who have never been pregnant are demonstrating their interest in avoiding unwanted pregnancies. Extending the general hypothesis, however, it can be hypothesized that the former group is less likely than the latter group to report receiving influence and support conducive to effective contraceptive use.

No studies have been conducted concerning teenage women's use of contraception after a first abortion and prior to a repeat abortion. A few studies have focused on women of all ages having repeat abortions; they found that most of these women adopted contraceptive methods after their first abortion indicating their desire to avoid a future unwanted pregnancy, but they again became pregnant after ineffectively using or terminating the use of their methods (Rovinsky, 1972; Cahn, 1976). But these teenagers and those who have never been pregnant and have used medically prescribed methods effectively for at least a year are demonstrating their interest in using medically prescribed methods to avoid an unwanted pregnancy. It can, therefore, be hypothesized that the former group is less likely than the latter group to repeat being influenced

and supported to use contraception effectively.

The following specific hypotheses can be derived from these hypotheses:

1. If a woman is having a first abortion, then she, as compared to a woman seeking a medically prescribed contraceptive method to avoid one, will have:

- A. (1) used fewer contraceptive methods and/or used them less effectively;
- B, (1) attitudes less conducive to the use of contraceptives and/or more conducive to risking an unwanted pregnancy and relying on abortions; and/or
 - (2) less knowledge about how to use contraceptive methods and how much protection they offer.
- C. (1) been less positively influenced to use contraception by the information provided by members of her potential social support system; and
 - (2) been influenced by sources who are less knowledgeable and/or less accessible.
- D. (1) received less support from her partner concerning the use of contraception and/or
 - (2) received less support from her parents concerning the use of contraception.

2. If a woman is having a repeat abortion, then she, as compared to a woman using a medically prescribed contraceptive method effectively for at least a year, will have:

- A. (1) had a greater number of problems using her contraceptive methods and as a result used them less often or less effectively;
- B, (1) attitudes less conducive toward the use of contraception and/or attitudes more conducive to risking an unwanted pregnancy and using abortions, and/or
 - (2) less knowledge about how contraceptives work and how much protection they offer.

- C. (1) been less positively influenced to use contraception by the information provided by members of her potential social support system; and
 - (2) been influenced by sources who are less knowledgeable and/or less accessible.
- D. (1) received less support from her partner concerning the use of contraception and/or
 - (2) received less support from her parents concerning the use of contraception.

II. METHOD

The study was conducted in the five clinics by Planned Parenthood of New York City (PPNYC) during Spring, 1976. The data collection process was synchronized with the normal clinic procedure in an effort to minimize interference with service delivery to the teenager (See Chart II for a description of the procedure; see Appendix A for the protocol).

After a teenager registered in the clinic, and while she was waiting in the reception area, a study interviewer explained the purpose and the procedure of the study, and assured her that participation was entirely voluntary and all records would be kept confidential. The study interviewers were female undergraduate and graduate students who participated in a training program prior to the initiation of the study. The program covered interview techniques, an understanding of clinic procedures and its impact on its participants, and an understanding of issues related to adolescents' use of birth control.

When a teenager volunteered, she was asked to fill out a short ten minute questionnaire on her knowledge of and attitudes related to the use of contraceptive methods and abortion. The teens were asked to answer nineteen attitude questions whose answers were recorded on five point Likert scales; they were also asked to correctly answer fourteen questions concerning how to use most contraceptive methods

and to estimate the chances of becoming pregnant using each of the methods.

During the normal individual counseling sessions, the clinic counselor recorded the teenager's social history and a detailed contraceptive and pregnancy history. Special forms were used in order to collect data on the relationship between contraceptive use and pregnancy experience.

After the medical service was provided and while the teenager waited for her usual exit interview, the study interviewer administered a twenty five minute questionnaire seeking (1) information about the teenager's exposure to sources of birth control information and influence, including sex education classes, media and providers of birth control services; and (2) data concerning the support provided by partners and parents. Upon completion of the questionnaire, the study interviewer answered any questions the teenager raised about the study or about contraception.

To statistically analyze differences between the groups on the various dependent variables, chi square analyses were conducted for variables using nominal data, and t tests were performed on interval data.

B. The sample

Study interviewers were assigned to cover the centers at those times when the largest number of teenagers have appointments for services. They tried to recruit all teenage consumers present at those times; over 90% volunteered to participate.

Data were collected for 592 unmarried teenagers who fit

into the four sub-groups. There were 145 repeat abortion patients (RAPs), 87 effective contraceptors (ECs), 163 first abortion patients (FAPs), and 197 new contraceptors (NCs). For 90% of the RAPs this was their second abortion; for the remainder, this was usually their third abortion.

III. RESULTS

The major applied hypothesis of this study is that new contraceptors (NCs) compared to first aborters (FAPs) and effective contraceptors (ECs) compared to repeat aborters (RAPs) would report receiving a greater degree of influence and support for effective use of contraceptors. Before doing so, it is worthwhile to describe the four groups and verify the degrees to which differences in pregnancy outcomes were mediated by differences in contraceptive use.

A. Demographic characteristics

Table 1 presents a general description of the four groups. There were consistent differences between Aborters (RAPs and FAPs) and Contraceptors (ECs and NCs). RAPs were more likely than ECs to come from Catholic homes, have three or more siblings, have parents who completed fewer years of school, and to be poor. The first two characteristics also distinguished FAPs from NCs; FAPs more than NCs also tended to come from families with three or more siblings.

B. Sexual and contraceptive behaviors

It was hypothesized that the differences in pregnancy outcomes between the FAPs and NCs would be the result of the latter's earlier adoption of contraception. It was also hypothesized that underlying the differences in pregnancy outcomes between the RAPs and ECs would be the latter's more effective use of contraception and lower incidence of problems using contraceptives.

Table 2 shows that during the period of times the teenagers were sexually active, FAPs as compared to NCs and RAPs compared to ECs used contraceptives less effectively. FAPs were sexually active for an average of fifteen months; only 20% had adopted a medically prescribed method during this time. A quarter of the NCs were virgins at the time of the study; the remaining NCs were sexually active for eleven months. Both RAPs and ECs were sexually active for just over two years. All teenagers engaged in sexual activity an average of six times a month. The table also shows that while Aborters had used contraceptives for a smaller proportion of their sexually active lives than did the sexually active Contraceptors, the former actually tried to adopt a method as often as did the latter.

The need to receive information conducive to contraceptive use is suggested by the reasons FAPs and RAPs gave for first becoming pregnant. One-third of those who used no method thought they were either too young to become pregnant or were having sex too infrequently to be at serious risk of pregnancy. Almost a quarter said that they did not know where to go for a contraceptive method or thought they were too young to get a method; a fifth expressed fear of side effects; and most of the remaining Aborters, as they described it, "never thought about it" or were "lazy."

Why did RAPs become pregnant a second time? Their

behaviors indicate that it wasn't because they lacked interest in avoiding a pregnancy. Almost 80% of the RAPs reported being offered all methods of contraception after their first abortion and 75% of all RAPs chose and began using a contraceptive method after their first abortion; over 50% chose the pill.¹

However, almost half of the RAPs using one reported having a problem with their method and almost 70% of all RAPs stopped using their methods. Most used no subsequent method. The most common problem and reasons for discontinuing their use of methods were that they experienced side effects (usually with the pill and IUD users) and had difficulties in routinely using or remembering to use one's method (usually by diaphragm and condom users).

More important, these patterns distinguished RAPs from the ECs. As table 3 indicates, after both groups were offered medically prescribed contraceptives by the service provider, RAPs, as compared to ECs, had more problems using their contraceptive methods, more often stopped using them without adopting another method and thereafter were more likely to have unprotected sex.

Did the RAPs' general abandonment of their methods demonstrate a lack of motivation to use contraception and

¹Fifty four percent of all RAPs had their prior abortion at a Planned Parenthood clinic. Over 90% of this subgroup of RAPs adopted a contraceptive method after the first abortion: almost two thirds adopted the pill and the distribution of methods adopted was the same.

a preference to rely on abortion? Two thirds of all RAPs and most of those who previously used the pill again chose the pill after the repeat abortion. This suggests that the side effects that many RAPs experienced were not so severe as to preclude their ability to use it.

C. Attitudes and knowledge about use of contraception

It was hypothesized that mediating the differences in contraceptive use and pregnancy outcomes between Contraceptors and Aborters would be the former's possession of attitudes more favorable to effective contraceptive use and/or a greater level of knowledge concerning the use of methods. The data support this hypothesis in relation to both variables.

1. Attitudes

Table 4 presents attitude scales created from the individual questions. (See Appendix B for the individual questions.) As the table shows, both Aborters and Contraceptors expressed attitudes generally conducive to using contraceptives and contrary to the notion of risking pregnancy and relying on abortions as a preferred method of birth control. However, FAPs' and RAPs' attitudes were not as strong as those of their comparable contraceptive groups.

Aborters' responses to the attitude questions showed that they also were more dissatisfied with available methods of contraception, more concerned about side effects, more likely to perceive the way some contraceptive methods

are used as a "hassle." They were more reluctant to touch their bodies, making it more difficult for them to use methods that require doing so.

Aborters' responses also suggested that they had less control of their sexual activity. They more frequently stated that they were unable to plan when they were going to have sex and were more likely to take a fatalistic approach toward becoming pregnant.²

2. Knowledge

Aborters generally did not become pregnant because they were unaware of the existence of contraceptives: both Aborters and Contraceptors reported first learning about birth control over a year before engaging in sexual activity. As Table 5 shows, each group of Aborters knew less about the use of contraceptive methods than did its comparative Contraceptive group (See Appendices C and D for individual items). Aborters gave significantly fewer correct responses to how the methods are used than did their comparison groups and were less able to accurately describe the effectiveness of each method. These differences occurred for questions relating to both prescription methods and non-prescription methods.

ECs generally gave more correct responses than did the

²This may reflect RAPs more episodic sexual activity and changes in partners. Elsewhere in the study, one third of a subsample of RAPs indicated that they stopped being sexually active for a period of time. This was often related to a change in partners.

other three groups. FAPs consistently answered the fewest number of questions correctly. Despite the fact that NCs never previously visited a formal service provider, NCs often gave an equal or greater number of correct responses than did RAPs.

Not unexpectedly, all groups knew more about the pill than any other method. Significantly, over 40% of the RAPs did not correctly answer the question on whether they would be protected three months after they stopped using the pill, and one out of four RAPs did not know that the kind of pill being used could be changed if side effects were experience.

In sum, each group of Aborters not only used contraceptives less effectively than did its comparable group of Contraceptors, but also expressed attitudes less conducive to effective contraceptive use and were less knowledgeable about how to use contraceptives and how much protection they offer.

D. Information and influence about birth control

After the medical service was provided and while the teenager waited for her usual exit interview, the teenagers were asked to: (a) recall all the sources who told them something about contraception or whose use of contraceptives and/or abortion influenced their own use; (b) specify the nature of the source's most important information and/or influence; and (c) rate the source with respect to its level of knowledge and accessibility for

information about birth control. There were additional questions about two formal sources (family planning service providers and sex education classes) to determine their relative influence as information sources. Since partners and parents are the "significant others" with the greatest potential for influencing teenagers' use of birth control, questions were also asked concerning their relationship to the teenagers' contraceptive behaviors.

It was hypothesized that Contraceptors would be more likely to report being influenced by members of their potential social support system in ways conducive to effective contraceptive use. There were few significant differences in the identity of each groups' sources and in the types of information the system as a whole communicated. However, there were significant differences in how the sources individually and collectively influenced the teenagers: each group of Contraceptors reported a greater net amount of influence conducive to contraceptive use than did its comparative group of Aborters.

1. Identifying the sources of influence

Over fifteen different sources of influence were recalled, with only a handful of sources mentioned by more than 25% of any group. Table 6 shows that each person recalled an average of four sources who influenced their contraceptive behaviors, with NCs recalling the most sources. There were no significant differences in the frequency with which the comparable group of Aborters and Contraceptors recalled being influenced by formal sources (e.g. sex

education classes, books, pamphlets and the media). However, Contraceptors reported being influenced by more informal sources (e.g. parents, other relatives, friends and acquaintances) than did Aborters. NCs reported being influenced by the greatest number of informal sources.

In general, all teenagers recalled the same sources as most frequently influencing them. ECs and RAPs cited PPNYC, the service provider, as a source of information and influence almost twice as often as did NCs and FAPs; almost all of the ECs and over half of the RAPs had previously used the agency's services. One of the reasons that sex education teachers/classes were the most frequently mentioned sources is that approximately 70% of all teenagers reported having attended at least one class in which birth control was taught; half of them reported learning about it in two courses. Also, the fact that this source is often created by society to provide this information and is identified as supposedly doing so, is likely to have increased teenagers' likelihood of remembering it.

The informal sources influenced the teenagers not only by what they said, but also by their actions. Over 90% of the teenagers knew at least one person, usually a friend, who had used birth control, with 63% of the NCs, 53% of the FAPs and 40% of the ECs and RAPs stating that at least one such person influenced their use of birth control. Over 75% of the teenagers knew someone who had an abortion, with 37% of the NCs compared to a quarter of

the other teenagers stating that the person's experiences influenced them.

2. The influence of source's information

The teenagers recalled a variety of ways in which their use of birth control had been influenced by what their sources did and said. As Table 7 shows, all four groups reported similar issues as being the most important ones about which their sources informed them. All groups reported that values -- the importance of using contraception to avoid getting pregnant -- was the most frequent topic of conversation; it dominated 25% of each group's interactions. Management-related information -- how to use methods and how they work -- was only the third most frequently mentioned category of information.

The major differences between the groups were that Contraceptors as compared to Aborters, reported more often receiving referrals for services and less often receiving information about side effects.

Table 8 shows that all groups described most of their sources' information as positively influencing them to use contraception -- either by helping them adopt a method of contraception when they first engaged in sexual intercourse or to do so at a later time, by inducing them to use their method more effectively or change to a more effective method, or by making them feel comfortable using birth control or talking about it. Less frequently did the teenagers report that the sources' inputs had no influence on them or adversely influenced them (i.e. induce them not

to adopt any contraceptive, to stop using contraceptives, or feel uncomfortable using or talking about birth control).

As Table 9 shows, both groups of Aborters, compared to Contraceptors, reported that their social system's net influence (all types of influence conducive to effective contraceptive use minus those adverse to its use) was less conducive to effective contraceptive use. The reasons differ for the two sets of teenagers. FAPs reported being positively influenced by fewer sources than did NCs. In fact, NCs reported the most sources influencing them to adopt a method when they first engaged in sexual intercourse. RAPs also reported fewer sources positively influencing them to use contraception, especially to maintain effective contraceptive use and feel comfortable using contraceptives than did ECs. In addition, RAPs reported more often than ECs and the other groups, that their sources adversely influenced their use of contraception.

3. Formal and informal sources

Table 9 also shows that the differences in how Aborters and Contraceptors were influenced were the result of differences in how informal sources influenced them and not in how formal sources influenced them. The data suggest that this is partly due to the presence or absence of differences in the kinds of information the teenagers reported receiving.

Aborters, more often than Contraceptors, reported that their informal sources told them about side effects

(both sets of t tests significant at $p < .05$) and less often reported being given referrals for information and services (both sets of t test significant at $p < .01$). Aborters, especially RAPs, more often reported hearing from mothers, sisters, and friends stories about the pill's side effects and incomplete information about how to use it; as a result they reported being scared into not adopting or terminating its use. In fact, a few RAPs observed that while they knew about the pill's side effects they did not know about any associated with abortions. Knowing about sexually active women who were not pregnant despite the fact that they used no method, made them somewhat willing to risk becoming pregnant.³

In contrast, Aborters and Contraceptors did not report receiving different types of information from formal sources. The lack of differences is significant since formal providers are supposed to provide needed influential information to those unable to obtain it elsewhere. The lack of differences are most striking in relation to the current service provider who allegedly provides teenagers with compensatory influential information.

Less than a third of the RAPs mentioned the current provider as a source of informational influence. Despite

³Informal discussions with never pregnant teenage women not involved in this study suggest this attitude may be present among an increasing number of teenagers.

RAPs greater incident of problems with side effects of contraceptive methods, they were not more likely than ECs to report receiving information about it; only 6% of both groups reported receiving this information. Yet, when they obtained information about side effects from the provider, it was more likely to have a positive influence on the teenagers' use of contraceptives than was such information from other sources. Nor were RAPs more likely to report being given management related information; about a quarter of both groups reported receiving it. The plurality of RAPs (32%) reported that the most important thing they were ever told was that it was important to use contraception; only half as many ECs reported receiving this type of information. Over 90% of RAPs and ECs left the service provider with a contraceptive method; 65% of both groups who mentioned it as an information source reported the information directly affected their use of contraceptives; most of the remaining teenagers said the information made them feel comfortable using contraceptives. Similarly, among the less than 20% of the FAPs and NCs who mentioned the provider as a source of information, there were no differences in the types of information they recalled receiving. They were more likely than the other two groups to report receiving management related information (40%). Over 90% of all FAPs and NCs left with a contraceptive method; about 70% of those who mentioned it as a source reported the information directly affected their use of contraceptives.

Sex education courses did not appear to provide the teenagers with information needed to effectively use contraception. About 65% of the FAPs, 80% of the NCs, 75% of the RAPs and 85% of the ECs reported learning about birth control in a sex education class. Over half reported learning about it in two classes. However, only 40% of the teenagers who mentioned a class as an information source felt the class directly influenced their contraceptive behaviors. The majority usually said that the information made them feel more comfortable about using contraception or had no influence at all. Further, there were no differences between teenagers who learned about birth control in class compared to those who did not in terms of the number of knowledge questions they answered correctly.

Nevertheless, the data suggest these classes can be valuable. All teenagers rated the courses very helpful to a person wanting to use contraception. The data suggest that while they may not be giving teenagers technical information essential to contraceptive use, they at least provide support, especially to those lacking other supportive sources. Each group of Aborters rated the class as more valuable to a person wanting to use contraception than did the comparative group of Contraceptors (both t test of differences between ratings were significant at $p < .01$). Also, Aborters were just as likely as Contraceptors to report the courses as a source of information despite

the fact they may have taken the courses less often.

4. Knowledge and accessibility of sources

It was hypothesized that differences in the nature of the influence received by Aborters and Contraceptors would be related to the degree to which their potential sources were knowledgeable about birth control and/or accessible for discussing it. Since it was impossible to collect data on all potential sources, the teenagers were asked to rate their actual sources.⁴

Table 10 suggests that having accessible sources to provide technical or supportive information is more relevant to the person's effective use of contraceptives than having knowledgeable sources. Overall, there were no significant differences in how the groups rated their sources' knowledge and accessibility. Closer analysis indicates this is due to the lack of differences in how the groups assessed formal sources: all groups rated them as highly knowledgeable and accessible, especially the clinic provider in which the study was being conducted. In general, all groups rated their informal sources the same -- moderately knowledgeable and moderately accessible.

ECs rated their informal sources as more accessible

⁴All teenagers were asked to rate their partners and parents on these issues, even if they were not mentioned as sources of informational influence.

than did RAPs. NCs rated their informal sources as being just as accessible as did the FAPs, but NCs reported having significantly more informal sources helping them to use contraception, indicating that the informal sector of their potential social support system was more accessible. In sum, it can be said that for both groups of Contraceptors, compared to Aborters, informal sources of support were more accessible.

As expected, sources of information varied widely in how accessible and knowledgeable they were perceived as being. In general, close friends, the clinic and books were the most accessible sources. Fathers and male friends in general were the two least accessible sources. Partners were rated as highly accessible with ECs rating them most accessible and RAPs rated them least accessible. Mothers were rated as moderately inaccessible, with only a slight majority of ECs rating them as moderately accessible. The service provider was rated as the most knowledgeable source. Female friends were rated as moderately knowledgeable, and about as knowledgeable as mothers and slightly more knowledgeable than partners. Male friends, in general, were rated as knowing relatively little about contraceptives.

5. Future sources of information

In order to help teenagers maintain effective use of contraceptives, it is important that they have supportive, competent sources to turn to if they have questions or problems. Staff in the family planning provider supposedly identify the provider as a resource so that the teenager will

use it. However, in response to the question, "who would you turn to if you had a question about birth control?" slightly less than half of all teenagers replied that they would first turn to the provider; significantly FAPs were least likely to do so.

Closer analyses of the data indicate that the teenagers who indicated that they would turn to the provider said they would do so because it was extremely knowledgeable. Teenagers who reported they would turn to less knowledgeable relatives and friends said they would do so because they were easier to contact or better able to understand the person's unique life situations.⁵ FAPs were most likely to give the latter reason.

Moreover, almost half of the FAPs and a third of the RAPs did not even perceive the service provider as a source of information; only a fifth of the Contraceptors didn't make this connection. The main reasons teenagers gave for not considering the service provider was that they thought of it only as a place to get medical services and because they felt the other person would better understand their personal situation.

E. Sources of support: partners and parents

Partners and parents also have the potential to

⁵Since the teenagers who mentioned the clinic as an information source were just as likely to give these responses as those who did not, it is likely that the high accessibility rating given to the provider may have been biased by the setting of the study.

assist and/or restrict the teenage woman's use of contraceptives by providing or withholding emotional and behavioral support. Partners' cooperation is essential for the use of coital related methods; parents' acceptance or rejection of their daughter's sexual activity will help or hinder her ability to routinely use some methods (e.g. pills which are kept at home). Accordingly, the teenagers were asked to describe the relationship of their partners and parents to their use of birth control, specifically the overall level of support obtained. It was hypothesized that Aborters would report receiving less support for using contraception than would Contraceptors.

1. Partners

As Table 11 shows, both groups of Aborters reported that their partners were less likely to have helped them to use birth control than were Contraceptors. In some cases, there were indications that the Aborters' partners were helpful only after they were already pregnant and supported their getting a contraceptive method after the abortion. Even when Aborters described their partners as being helpful, it was usually only indirectly related to actual contraceptive behaviors -- it mainly made them feel more comfortable with their decisions. Contraceptors, on the other hand, reported their partners directly affected their behavior. NCs most often characterized their partners as helping them to adopt a contraceptive method, while ECs stated that their partners helped them to continue using contraceptives effectively.

Similarly, Aborters, as compared to Contraceptors, were more likely to report that their partners were less concerned with whether she became pregnant, were less willing to use the condom, were less accessible, and discussed birth control less frequently.

One possible reason for the lesser support, is that the Aborters were less involved with their partners. RAPs and FAPs were less likely to feel they would continue their relationship with their partners. Also, comments from a subgroup of RAPs suggested that for at least one third of the RAPs, the partner responsible for the repeat unwanted pregnancy was different from the one responsible for the first one.

2. Parents

Table 10 also shows that Aborters were less likely to report their mothers helped them use birth control. This occurred despite the fact that a plurality of all groups felt their mothers had no influence. Aborters who believed that their mothers had been helpful were less able to articulate specific ways in which they had helped. Contraceptors most often reported that their mothers helped them adopt prescription methods.

Other data parallel these findings. About 70% of the mothers of ECs and RAPs knew about their daughters' sexual activity; ECs' mothers more often accepted this fact and more often were aware that their daughters were at the clinic receiving a service. Only a third of the FAPs and a quarter of the NCs' mothers knew that their daughters

were sexually active; only half of each group's mothers accepted it. NCs, however, were more likely to report that if their mothers knew about their sexual activity, it was because they volunteered the information or because their mothers had asked them. Aborters' mothers often found out because the teenager was already pregnant.

Even when mothers had no influence, Aborters, especially RAPs, appear to have been at a disadvantage. Many RAPs who described their mothers as having had no influence stated their mothers gave them mixed messages: e.g. "If you're having sex, use a method, but I don't want to know anything about it." This often meant it was difficult to keep supplies at home. It also meant that despite their greater problems with contraceptive methods, they could not turn to their mothers for help. ECs who reported no influence often said it was because they did not need help from their mothers.

Fathers remained an untapped source of support: over 70% had no effect on any of the teenagers. Only 1% mentioned them as a source of information and influence. They were rated as the least accessible potential sources of information and one of the least knowledgeable. All teenagers, except ECs, reported that if their fathers had any influence on their use of contraception, it generally made using it difficult.

IV. DISCUSSION

A. Social Support and the Avoidance of Unwanted Pregnancies

The results support the hypotheses and show that differences in teenage women's pregnancy histories were related to differences in how they interacted with their potential social support system. Compared to NCs, FAPs engaged in unprotected sex for a longer period of time, had attitudes less conducive to effective contraceptive use and were less knowledgeable about contraception. RAPs generally adopted contraceptive methods after the first abortion, but were more likely than ECs to experience problems using the methods and engage in unprotected sex. Compared to ECs, RAPs also had attitudes less conducive to effective contraceptive use and were less knowledgeable about contraception. Both groups of Aborters were less likely to report being influenced to use contraception than were the Contraceptors. The Aborters reported receiving less influential information conducive to effective contraceptive use and less overall support for effective contraceptive use from partners and parents. The Aborters reported receiving influential information to help them effectively use contraception less often from informal sources and no more often from formal sources as did the Contraceptors.

Interpreting the teenagers' response into a single time dimension, it is possible to describe the dynamics of the prospective repeat aborter's interactions with her

potential social support system. This teenager, upon initially becoming sexually active, appears to be less likely to receive information conducive to adoption and use of contraceptives, including information about the accessibility of contraceptive services and is less likely to receive help for using contraception from her partner and her mother. Adopting no contraceptive method she becomes pregnant. She chooses to abort the pregnancy because she feels she is too young to care for a child and/or wants to complete school. After the abortion, she adopts a contraceptive method if offered one. Later she stops using it because of problems inherent in the method (e.g. side effects) or in the use of it (e.g., partner is against it or it isn't always available). She again becomes pregnant and chooses to abort the pregnancy for the same reasons she previously did. After the abortion, she again adopts a contraceptive method.

The data suggest that she would have been better able to prevent the unwanted pregnancies if: (1) contraceptive methods were available which could easily be used, present no threat of side effects, and not require her partner's cooperation; and/or (2) she received (a) more relevant, technically competent and supportive information for effective contraceptive use from informal and formal sources, to provide her with stronger attitudes and better knowledge about how to use contraceptives routinely, and (b) more emotional and behavioral support from her partner and parents in order to use contraceptives

regularly.

B. The Potential Social Support System Paradigm

The teenagers recalled a wide variety of sources who influenced their use of contraception by direct communications and/or by their own behaviors. The wide distribution of sources, types of information, and types of influence that the sources provided demonstrate the importance of understanding the factors determining how a person interacts with her/his social support system.

1. Number of sources

The fact that each teenager mentioned an average of four sources of informational influence does not necessarily mean that other sources had no influence. Other sources may not have been recalled because their inputs were relatively inconsequential or because the source itself was not easily identifiable as a source. RAPs and ECs were sexually active for a year longer than the other two groups yet recalled a similar number of sources. One possible reason is that earlier sources were forgotten; this would explain why ECs did not recall more sources inducing them to adopt contraception when they first had sex. Alternatively, the time constraints of the study may have limited everyone's ability to recall all sources. Another reason may be the salience of sources for providing this type of information. Sex education classes and family planning clinics are sources which are supposed to provide influential information; friends, relatives and acquaintances play a large number of roles and their inputs in this area may

be less easy to recall.

2. Information and influence

The teenagers were asked to recall the major types of information and influence that each source of technical and supportive information provided. It is likely that many of the sources mentioned actually provided more than one type of information and influenced the person in different ways. Indeed, one of the reasons that some of these sources may have been recalled is because they interacted and influenced the teenager a number of times, while others did not.

The importance of understanding the multiple influences that sources may have, is demonstrated by one teenager's comments concerning her mother's influence on her. After becoming pregnant the first time, the teenager adopted the pill because her mother had recommended that she do so. Later, when she was not having sexual intercourse for a number of months, her mother suggested that she stop using the pills because of possible side effects; no mention was made that should she become sexually active again she should resume using the pill or another method. She stopped using the pill; a number of months later she resumed having sex, used no method and became pregnant. When asked to describe the level of support she obtained from her mother, she characterized her mother as having no influence - because she had both helped her and made it difficult for her to avoid becoming pregnant.

3. Accessibility and knowledge of potential sources

According to the paradigm, it was expected that Aborters, as compared to Contraceptors, would find members of their potential social support system less accessible and/or knowledgeable. The study focused only on those sources who actually influenced the teenagers; thus, nothing can be said of the impact of the potential, but non-influential sources of social support on the teenagers' choice and use of sources. Still, RAPs rated their sources as less accessible than did ECs and, while FAPs and NCs rated their sources as equally accessible, NCs recalled more sources, suggesting that they actually had great access to information. Their greater recall may also reflect their unique position in their contraceptive history - they were seeking to adopt a medically prescribed contraceptive method and needed information in order to do so. These differences were attributable to differences in access to informal sources. It is likely that differences might have been more pronounced if the accessibility of other potential sources had been measured.

There were no major differences in how knowledgeable the Aborters and Contraceptors rated their sources of influence. While it is possible that there were actual differences, and the less knowledgeable Aborters did not note them, the data suggest this was not the case. Each teenager was asked to rate her own knowledge. The groups' self-ratings placed them in the same order as did their

actual scores on the knowledge tests: ECs most knowledgeable, NCs second, RAPs third and FAPs least knowledgeable. (The differences between the comparative groups were significant at $p < .01$.) Since the groups were fairly objective in their estimates of their own knowledge, it is likely they were also objective in their estimates of their sources' knowledge.

The data suggest that it is more important that potential sources are accessible to provide some form of conducive information than that they be extremely knowledgeable. A source does not have to be fully knowledgeable to provide a limited amount of technical information about contraceptives, to provide referrals to other sources and service providers, or to provide supportive information (e.g., that others in her peer group are also using contraception). While the overwhelming majority of teenagers identified the current service provider as the most knowledgeable source, less than half said they first would turn to it for future information. Teenagers chose sources they recognized as less knowledgeable (e.g. friends, relatives) because they were considered more accessible and easier to talk to than the service provider, or because they would better understand the person's individual situation and therefore provide more individualized support.

C. Increasing Access to Social Support

How do we increase a person's access to social support?

The opinion leadership approach to intervention in social systems, focuses on trying to get certain people, opinion leaders, to disseminate information. The data show that such an approach is incomplete. By focusing on opinion leaders, these efforts ignore the influence of other people; yet, the data indicate that the sources who might have been expected to significantly influence the teenagers (e.g., parents and birth control providers) often did so less often than did other sources. Also, the opinion leadership approach focuses on the dissemination of information likely to influence the person in the desired direction; it ignores the complexity of information about the issue in question and the fact that the actual information conveyed may have no influence at all or even influence a person to act against his/her own self interests (e.g. scare a person into not using birth control and becoming susceptible to an unwanted pregnancy).

The potential social support system paradigm suggests alternative strategies. It recognizes that there are likely to be a large number of potential sources of influence who are not affecting the person, and that not all of those who do influence the person necessarily will help him/her. Indeed, only a handful of potential sources were mentioned by at least a third of the teenagers. In general, this seems to be because sources were either not accessible to discuss this matter (e.g. parents) or because when they did interact they did not provide influential information (e.g. the service provider) or because they were not knowledgeable

(e.g. partners).

Accordingly, intervention would not be limited to identifying opinion leaders to pass on information, but would include changing the manner in which the person is influenced by all potential sources. This means (1) helping already active sources to provide more accurate and complete information and/or more behavioral support, (2) helping competent sources not actively providing information and support to do so, and/or (3) removing barriers which make competent and potentially supportive passive sources become more accessible. This may require providing sources with a variety of technical skills (e.g., knowledge about birth control and communication skills) and with attitude sets conducive to providing others with support. It also necessitates providing sources with a potential social support system perspective; that is, an understanding that if knowledgeable sources are not providing a person with information, then he/she is likely to rely on information from less competent sources. Therefore, if a person is going to engage in a set of behaviors, such as sexual intercourse, the lack of support to act in his/her own self interest - to avoid unwanted pregnancies - may adversely affect the person's ability to do so. Thus, as a parent who is unwilling to provide information about contraception for fear it will lead the teenager to initiate sexual activity should be aware that the teenager is likely to learn about it else-

where and that it may not be complete, accurate or supportive enough to help the person avoid an unwanted pregnancy. Finally, it means helping people recognize the risks involved in being influenced by inaccurate and incomplete information and their capacity to seek out other sources for information and support.

The importance of recognizing the dynamics of a social system, in which potentially competent and supportive sources are not always influencing people while less competent and supportive sources are, can be seen by viewing the teenagers as sources of influence for other people. All of the teenagers reported that they were highly accessible for providing others with information: nearly 90% reported that at some time they had given information to friends. ECs and RAPs reported talking to more of their friends about birth control than did NCs and FAPs, probably because they were sexually active for a longer period of time. Similarly, the former groups more often reported being asked for information and felt they were more likely than their peers to be asked for it. Nearly half of all teenagers reported that they offered information to others. However, RAPs were not only slightly more likely than other teenagers to report offering information to others, but were also more likely to recall providing information about side effects and what to do when confronted with them. In other words, not only were more competent teenagers, ECs compared to RAPs and NCs compared to FAPs, no more likely to report providing infor-

mation about birth control to others, but RAPs, who appeared to be most confused about side effect related issues, were the group most likely to discuss this topic.

The data suggest, therefore, that the potential of all informal sources to provide information should be recognized. Intervention efforts should be aimed at encouraging those who are competent to take a more active role in disseminating information (e.g. ECs) and encouraging all other to recognize the limits of their knowledge and provide others with whatever level of information and support is most appropriate for them. At the least, this might mean having consumers of birth control services actively refer people to the service provider for services and for information which they cannot completely and accurately provide. It also means that service providers should develop techniques to accomplish this.

Similarly, the data suggest the need to help partners and parents to provide the teenage woman with support conducive to effective contraceptive use. Despite their close relationship to the teenager these people were usually not mentioned by the teenagers as sources of information and, more importantly, often were not supportive of the teenage woman's use of contraception, or even made it difficult for her to protect herself against unwanted pregnancies. One way of reaching them, would be to understand which sources of their potential social support systems are most likely to provide them with information

about how to help the teenage woman effectively use contraception and increase these sources' capacity to provide conducive influence on this topic.

D. The Role of the Formal Intervention Systems

Formal intervention systems often are designed to provide individuals with compensatory information and services. The data suggest that the formal systems, especially the birth control service provider, did not always complement the teenagers' need for information. Both FAPs and RAPs as compared to Contraceptors, received less conducive information from informal sources. RAPs also reported more problems using contraception. Yet, both groups of Aborters reported receiving the same types of information and being influenced in similar ways by the service provider as did its comparison group of Contraceptors.

Formal systems often operate under two significant constraints. First, they see themselves as the major, if not the sole, source of information that the person obtaining services needs, and therefore feel obligated to discuss almost every relevant topic. Second, they lack the time to do this effectively.

The data concerning the current birth control provider illustrate these points. While the provider may want to give each person all possible information which may be useful in effectively using contraception, the volume of such information (e.g., the existence of all methods, how they work and are used, side effects involved,

estimates of effectiveness, etc.) and the limited time available in which to do so, make the task impossible. Thus, providers often resort to giving consumers a standardized general description of all methods available, and answer specific questions about the woman's chosen method. The providers often ignore the fact that the person already obtained some information from other sources and is likely to obtain some after the visit to the provider. Indeed, less than a fifth of the FAPs and NCs, who were at the provider for the first time, mentioned it as a source of informational influence. Also, RAPs were just as likely as NCs to answer the knowledge questions correctly, despite the fact they previously had used a birth control provider's services. It is likely, therefore, that some of the provider's general information actually duplicates that which the teenagers heard elsewhere. This, in addition to the fact that other sources were easier to talk to or better understood their personal needs, may also explain why only half of the teenagers reported that they first would turn to the service provider for future information.

The data suggests that formal intervention systems could be more effective if they recognize their relative role within people's potential social support system, and focus on providing each of its consumers with that set of services he/she is not likely to obtain elsewhere. For the birth control service provider, this means identifying its special informational, educational and counselling functions

and individualizing them to meet the needs of particular subgroups of consumers, especially prospective repeat aborters. In terms of information, it would first have to identify exactly what a person needs to know in order to use methods effectively over time, and then assess the person's present knowledge, correct misconceptions and offer whatever additional information is needed. While counseling traditionally has focused on how the woman herself would use methods, the data suggest it should also focus on helping her to consider how her partner and parents will affect her ability to use methods before a specific method is adopted. Counseling should also focus on issues other than choosing a method that best fits her current situation: it should make her aware of the likelihood of changes she is going to confront in her sexual activity and use of contraception. She is likely to find that the method she chooses in the clinic may not be the best method for her in the future due to changes in the frequency of sexual activity, changes in her partner, social and physiological problems using her method, and the availability of new methods. Thus, she must be provided with the skills to perceive changes in her life style and sexual and contraceptive experiences, and be able to adapt to the. In part, this means adopting a system of contraception rather than just one method - i.e., one method is primarily used now, another is chosen as a back-up and others are considered for use when needed. It also means identifying future competent sources to turn

to for information.

Finally, the provider will be more effective if it increases its own accessibility to the teenagers. This means being more clearly identified as a source able to provide competent, relevant information and providing more personalized services, particularly to those whose life situations present obstacles to effective use of contraception.

E. Coordinating Community Resources

The most significant implication of the potential social support system paradigm is that formal sources can most effectively provide human services if they coordinate their services with the activities of other potential sources of influence.

Since the capacity of an intervention system to influence its consumers is affected by the nature of the influence provided by other sources, both before and after the intervention, the formal source can maximize its impact by improving the quality and quantity of support provided by these other sources and integrating its support with that of the other sources. This means enabling each potential source to provide the target person with that degree of technical and emotional support most appropriate to its level of expertise and relationship to the person. For instance, all informal sources could be helped to provide the teenage woman with at least an awareness of the existence of contraceptive methods, provide her with referrals to more knowledgeable sources

for more detailed information and services, and make her feel comfortable to discuss and use methods. Formal sources could specialize in providing detailed technical information to all teenagers and special counselling to those who are most likely to experience future problems (e.g. prospective RAPs). By enabling as many sources as possible to work together to provide the person with information and support conducive to effective contraception, the person is likely to receive the necessary support when needed and less likely to be influenced by inaccurate and incorrect information or be forced to rely on no support at all.

Finally, this approach is also likely to prove more cost efficient than current ones providing people with services. Traditionally, new intervention systems are created to provide people with needed services with little consideration given to their role in the person's potential social support system. To enable teenagers to adopt contraceptive methods early in their sexual lives, sex education courses have been created and outreach workers disseminate information for providers of birth control methods. Similarly, Furstenberg (1972) recommended that abortion clinics use follow-up procedures to help women of all ages delay repeat unwanted pregnancies. While these sources may be competent to provide the desired information, they are generally not accessible. While sex education teachers were the most frequently mentioned source

of information, they were rated as relatively inaccessible for information; as already noted, service providers were not always perceived as the source they would turn to to solve problems about using contraceptives. Increasing the capacity of accessible, naturally existing sources of potential influence, such as informal sources and the media, to provide conducive support would not only be a more effective method of ensuring that the person receives the support, but would not necessitate the expense of maintaining these formal service systems.

CHART I

THE INFLUENCE OF ONE'S POTENTIAL SOCIAL SUPPORT SYSTEM

INFLUENCE
from the
presence or absence of

TECHNICAL AND SUPPORTIVE
INFORMATION
(Conducive or Antagonistic
to Effective Contraceptive Use)

provided by
formal and informal sources

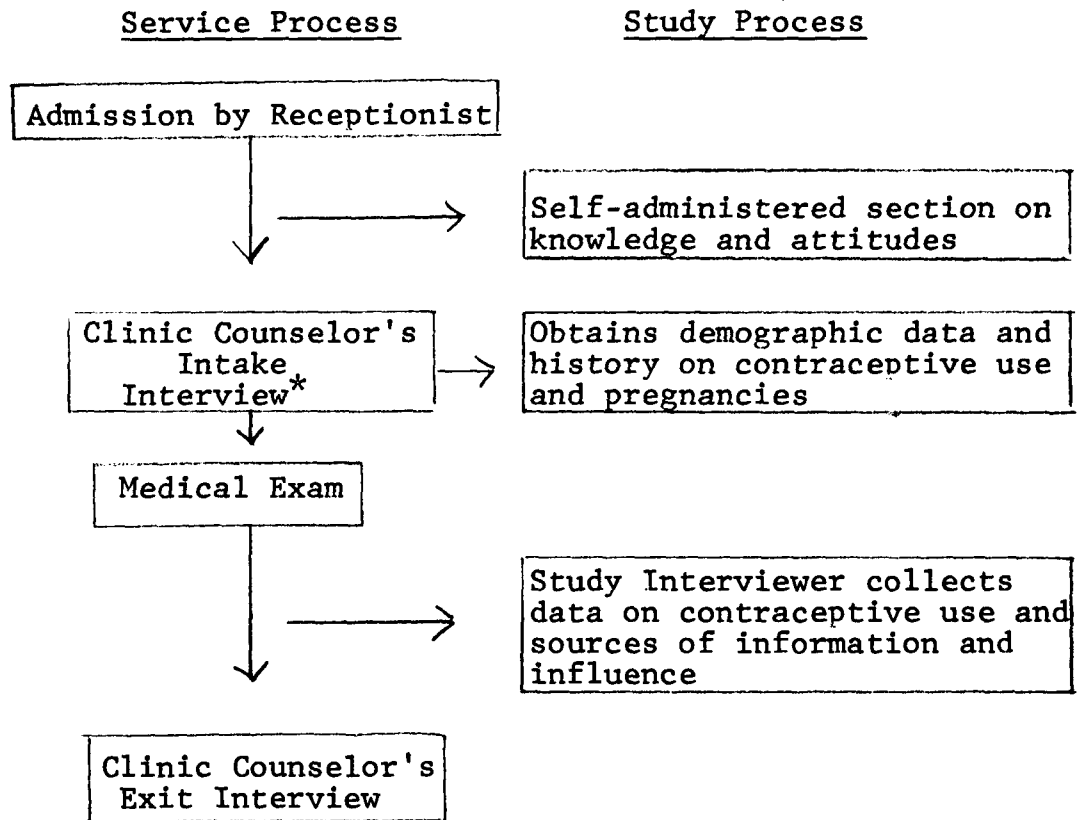
EMOTIONAL AND BEHAVIORAL
SUPPORT
(Conducive or Antagonistic
to Effective Contraceptive Use)

provided by
partners and parents

ATTITUDES AND KNOWLEDGE
about using birth control
and risking unwanted pregnancy

AVOIDANCE OF
UNWANTED PREGNANCIES

CHART II

Service and Study Procedure

*In some cases, this section was preceded by a group education session which discusses contraception.

TABLE 1
COMPARISONS BETWEEN DEMOGRAPHIC CHARACTERISTICS OF CONTRACEPTORS AND
ABORTERS

	<u>NC</u> ¹	<u>FAP</u> ¹	<u>t/x</u> ²²	<u>p</u> <	<u>EC</u> ¹	<u>RAP</u> ¹	<u>t/x</u> ²²	<u>p</u> <
Mean Age	16.7	17.1	3.19	.01	17.9	17.6	2.32	.01
Mean last grade of school completed	10.6	10.7	0.70	n.s.	11.7	10.9	4.12	.01
<u>Race</u>								
% White	61.1	50.1	5.42	n.s. ³	51.9	39.1	8.42	.01 ³
% Black	29.2	33.1			45.3	45.0		
% Hispanic and Other	9.7	16.8			2.8	15.9		
<u>Religion</u>								
% Catholic	43.3	58.2	17.29	.01 ⁴	30.1	53.7	23.11	.01 ⁴
% Protestant	25.1	28.1			37.3	24.3		
% Jewish	22.5	5.2			22.9	3.7		
% Other	3.8	3.9			2.5	8.0		
% None	5.3	4.6			7.2	10.3		
<u>Parents' Education</u>								
% 1-11 grade	7.1	23.2	30.61	.01 ³	10.2	30.9	15.69	.01 ³
% 12 grade	38.1	46.8			37.7	37.4		
% 13+ grade	54.8	55.9			52.1	31.7		
<u>Poverty Indicator</u>								
% using Medicaid	20.1	28.2	3.12	n.s. ⁵	10.1	36.9	20.13	.01 ⁵
<u>Number of Siblings</u>								
% 0	6.1	5.0	6.34	n.s. ³	8.1	8.0	12.70	.05 ³
% 1-2	51.0	39.1			57.2	33.8		
% 3+	42.9	55.9			34.7	58.2		
<u>Lives with:</u>								
% Parents	57.9	53.2	6.60	n.s. ⁵	46.6	43.8	17.18	.01 ⁵
% Mother/guardian	29.8	31.7			24.1	38.2		
% Girlfriend/alone	5.2	2.1			15.1	3.2		
% Partner	1.1	1.2			2.1	7.1		
% Other	6.0	11.8			2.1	7.7		

¹ Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

³ X², df = 2
⁴ X², df = 4
⁵ X², df = 1

² All X² distributions add up to 100%

TABLE 2
COMPARISONS BETWEEN THE CONTRACEPTIVE BEHAVIOR OF
CONTRACEPTORS AND ABORTERS

Behaviors	<u>NC</u> ¹	<u>FAP</u> ¹	<u>t/X</u> ²	<u>p</u> ^{<}	<u>EC</u> ¹	<u>RAP</u> ¹	<u>t/X</u> ²	<u>p</u> ^{<}
<u>Contraceptive use at first sexual intercourse</u>								
% using a method	54.2	39.9	7.05	.01 ²	63.9	34.8	19.81	.01 ²
<u>Experienced problems using birth control methods</u> ³								
% reporting problems	27.1	41.1	28.80	.01 ²	19.0	44.9	16.22	.01 ²
<u>Mean number of time intervals in which no contraceptive was used</u> ⁴	0.40	0.78	6.55	.01	0.48	1.37	8.82	.01
<u>Mean number of contraceptive methods ever used</u>	0.68	0.79	1.37	n.s.	1.54	1.59	0.37	n.s.
<u>Vigilance (% of sexually active time protected by a method</u>	0.38	0.27	2.03	.05	0.73	0.43	5.29	.01

¹ Group designations and sample sizes are:
 NC = new contraceptors: 148 subjects (25% of the 197 NCs were Virgins).
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

² X² distributions add up to 100%; df = 1

³ NC = 80, FAP = 67, EC = 37, RAP = 116

⁴ The period of time during which the women were sexually active was divided into time intervals representing the predominant use or non-use of a contraceptive method. If a woman first used no method at all, then adopted and used the pill for a period of time, and later stopped it to use the diaphragm, her sexual history will consist of three intervals; by the use of no method, the pill, and the diaphragm.

TABLE 3

COMPARISONS BETWEEN THE USE OF CONTRACEPTION BY ECs
AND RAPs AFTER VISITING A BIRTH CONTROL PROVIDER

Contraceptive Use	<u>EC</u>	<u>RAP</u>	<u>X²</u>	<u>p³<</u>
<hr/>				
<u>Experienced problems</u> <u>using contraceptive</u> <u>methods¹</u>				
<u>% reporting problems</u>	15.2	49.1	25.01	.01
 <u>Stopped using method</u> <u>obtained from provider¹</u>				
<u>% stopping</u>	25.4	70.1	43.92	.01
 <u>Experienced problems</u> <u>using the pill²</u>				
<u>% reporting problems</u>	5.3	53.8	44.60	.01

¹ Group designations and sample sizes are:
EC = effective contraceptors, 87 subjects
RAP = repeat aborters, 110 subjects

² 80 ECs and 70 RAPs used the pill

³ X² distributions add up to 100%, df = 1

TABLE 4
COMPARISONS BETWEEN CONTRACEPTORS' AND ABORTERS'
ATTITUDES TOWARD THE USE OF BIRTH CONTROL¹

Attitude scales	<u>NC²</u>	<u>FAP²</u>	<u>t</u>	<u>p<</u>	<u>EC²</u>	<u>RAP²</u>	<u>t</u>	<u>p<</u>
<u>Mean scores</u>								
Favor regular use of birth control method ³	3.83	3.63	3.97	.01	3.97	3.67	4.24	.01
Opposed to risking an unwanted pregnancy and relying on abortions ⁴	4.60	4.38	4.05	.01	4.76	4.44	4.19	.01
Am able to control and plan my sexual behavior ⁵	3.64	3.17	6.38	.01	3.99	3.29	8.23	.01

¹ See Appendix B for individual items. Items scored on 1-5 scale: 1 = strongly disagree, 5 = strongly agree.

² Group designations and sample sizes:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

³ alpha = .548

⁴ alpha = .404

⁵ alpha = .364

TABLE 5
COMPARISONS BETWEEN CONTRACEPTORS' AND ABORTERS'
KNOWLEDGE ABOUT THE USE OF CONTRACEPTIVE METHODS¹

Knowledge scores	<u>NC</u> ²	<u>FAP</u> ²	<u>t</u>	<u>p</u> <	<u>EC</u> ²	<u>RAP</u> ²	<u>t</u>	<u>p</u> <
<u>Overall knowledge</u> % questions answered correctly	53.3	43.3	4.45	.01	58.6	48.3	3.86	.01
<u>How to use contra-</u> <u>ceptives correctly</u> % questions answered correctly	51.4	45.5	2.68	.01	59.9	50.5	3.63	.01
<u>How much protection</u> <u>contraceptives offer</u> % questions answered correctly	55.2	41.1	4.84	.01	57.2	46.1	3.80	.01

¹ See Appendices C and D for individual items

² Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

TABLE 6
COMPARISONS BETWEEN CONTRACEPTORS' AND ABORTERS' SOURCES OF INFLUENCE¹

A. Number of sources	<u>NC</u> ²	<u>FAP</u> ²	<u>t</u>	<u>p</u> <	<u>EC</u> ²	<u>RAP</u> ²	<u>t</u>	<u>p</u> <
Mean number of sources	4.08	3.53	2.60	.01	3.80	3.96	0.70	n.s.
Mean number of formal sources	1.29	1.42	1.23	n.s.	1.64	1.71	0.50	n.s.
Mean number of informal sources	2.79	2.11	4.05	.01	2.16	2.25	0.54	n.s.
B. Identity of sources	<u>NC</u> ²	<u>FAP</u> ²	<u>X</u> ² ³	<u>p</u> <	<u>EC</u> ²	<u>RAP</u> ²	<u>X</u> ² ³	<u>p</u> <
<u>% mentioning each source as being influential</u>								
Sex education class/teacher	56.1	57.0	1.01	n.s.	49.9	55.1	1.33	n.s.
Close friends	61.9	47.9	7.12	.05	42.2	44.9	3.26	n.s.
Books and pamphlets	39.2	43.8	4.31	n.s.	31.3	35.9	3.97	n.s.
Mother	34.1	20.3	8.82	.01	33.2	40.8	4.82	n.s.
Second friend	35.9	25.8	4.13	n.s.	21.3	26.1	4.16	n.s.
PPNYC (service provider)	16.9	16.2	0.82	n.s.	40.8	31.2	1.64	n.s.
Sister	28.1	20.3	6.12	n.s.	23.9	23.1	0.17	n.s.

¹Sources of influence were sources who either provided information and/or whose use of birth control was acknowledged as influencing the teenager.

²Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

³1 degree of freedom

TABLE 7
COMPARISONS BETWEEN TYPES OF INFORMATION PROVIDED TO
CONTRACEPTORS AND ABORTERS

<u>Types of information</u>	<u>NC¹</u>	<u>FAP¹</u>	<u>t</u>	<u>p<</u>	<u>EC¹</u>	<u>RAP¹</u>	<u>t</u>	<u>p<</u>
Mean number of sources giving information								
Management (how to use methods, how methods work)	.74	.64	0.95	n.s.	.69	.63	0.50	n.s.
Effectiveness of methods	.75	.69	0.62	n.s.	.75	.70	0.40	n.s.
Side effects of methods	.30	.49	2.68	.01	.32	.55	2.25	.05
Method - specific (e.g. told to use the pill)	.49	.29	2.35	.05	.23	.39	1.73	n.s.
Referrals for information and/or services	.65	.37	3.38	.01	.67	.38	2.89	0.01
Values (e.g. birth control exists and should be used)	1.07	.90	1.50	n.s.	.90	1.03	0.78	n.s.
Gen'l Information	.18	.18	0.12	n.s.	.39	.29	1.07	n.s.

¹ Group designations and sample sizes are:
NC = new contraceptors: 197 subjects
FAP = first aborters: 163 subjects
EC = effective contraceptors: 87 subjects
RAP = repeat aborters: 145 subjects

TABLE 8
COMPARISON BETWEEN TYPES OF INFLUENCE SOURCES
HAD ON CONTRACEPTORS AND ABORTERS

Types of influence	<u>NC</u> ¹	<u>FAP</u> ¹	<u>t</u>	<u>p</u> <	<u>EC</u> ¹	<u>RAP</u> ¹	<u>t</u>	<u>p</u> <
Mean number of sources influencing person to:								
Adopt first method	.92	.54	3.53	.01	.59	.64	0.44	n.s.
Adopt other method	.84	1.02	2.42	n.s.	.83	.86	0.18	n.s.
Improve/maintain effective use of birth control	.74	.47	2.26	.05	.82	.54	2.7	.05
Feel comfortable using/talking about birth control	1.14	.87	2.21	.05	1.06	.70	2.56	.01
No influence	.15	.34	3.10	.01	.31	.78	3.34	.01
Be adversely affected (behaviors and attitudes)	.29	.29	0.04	n.s.	.19	.44	3.32	.01

¹ Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

TABLE 9

COMPARISONS BETWEEN THE RELATIVE INFLUENCE OF FORMAL AND INFORMAL
SOURCES ON CONTRACEPTORS AND ABORTERS

Sources' influence	<u>NC</u> ¹	<u>FAP</u> ¹	<u>t</u>	<u>p</u> <	<u>EC</u> ¹	<u>RAP</u> ¹	<u>t</u>	<u>p</u> <
<hr/>								
Mean number of sources influencing effective contraceptive behaviors ²								
All sources	2.50	2.03	3.24	.01	2.24	2.04	2.20	.05
Formal	.67	.72	0.17	n.s.	.80	.98	1.83	n.s.
Informal	1.83	1.31	3.01	.01	1.44	1.06	3.31	.01
Mean number of sources positively influencing contraceptive use ³								
All sources	3.64	2.90	3.71	.01	3.30	2.74	1.99	.05
Formal	1.16	1.16	0.07	n.s.	1.36	1.31	0.30	n.s.
Informal	2.48	1.74	4.51	.01	1.94	1.43	2.58	.01
Mean net influence of sources ⁴								
All sources	3.33	2.61	3.39	.01	3.11	2.30	2.02	.05
Formal	1.10	1.11	0.12	n.s.	1.25	1.15	0.15	n.s.
Informal	2.23	1.50	3.98	.01	1.86	1.15	3.82	.01

¹Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

²effective contraceptive behaviors = number of sources influencing person to: adopt first method, adopt other methods and improve use of contraceptives.

³positive influence = number of sources influencing effective contraceptive behaviors and making the person feel comfortable using contraception.

⁴net influence = number of sources providing positive influential contacts minus number of sources providing negative influential contacts.

TABLE 11
COMPARISONS BETWEEN PARTNERS' AND PARENTS' SUPPORT FOR
CONTRACEPTORS AND ABORTERS USE OF BIRTH CONTROL

Support	<u>NC</u>	<u>FAP</u>	<u>X²¹</u>	<u>p²<</u>	<u>EC</u>	<u>RAP</u>	<u>X²¹</u>	<u>p²<</u>
<u>Partner's Support</u> ³								
% helped	80.1	45.9	44.91	.01	72.4	56.6	8.13	.05
% had no effect	17.7	41.4			25.3	32.6		
% made it difficult	2.2	12.7			2.3	10.8		
<u>Mother's Support</u> ⁴								
% helped	37.4	25.5	6.38	.05	37.3	21.8	7.44	.05
% had no effect	38.0	50.4			48.0	50.0		
% made it difficult	24.6	24.1			14.7	28.2		
<u>Father's Support</u> ⁵								
% helped	4.8	6.8	2.32	n.s.	19.1	5.8	6.10	.05
% had no effect	72.3	71.0			70.0	76.1		
% made it difficult	22.9	22.2			10.9	18.1		

¹ Distributions add up to 100%

² 2 degrees of freedom

³ Sample sizes: NC = 197 FAP = 163 EC = 87 RAP = 145

⁴ Sample sizes: NC = 173 FAP = 138 EC = 65 RAP = 119

⁵ Sample sizes: NC = 122 FAP = 81 EC = 55 RAP = 72

TABLE 10

COMPARISONS BETWEEN CONTRACEPTORS' AND ABORTERS' ESTIMATES
OF SOURCES' KNOWLEDGE ABOUT BIRTH CONTROL AND ACCESSIBILITY
FOR PROVIDING INFORMATION¹

	<u>NC²</u>	<u>FAP²</u>	<u>t</u>	<u>p<</u>	<u>EC²</u>	<u>RAP²</u>	<u>t</u>	<u>p<</u>
<u>Knowledge scores</u>								
All sources	3.83	3.76	1.09	n.s.	3.85	3.75	1.13	n.s.
Formal sources	4.50	4.42	1.02	n.s.	4.41	4.50	0.82	n.s.
Informal sources	3.55	3.37	2.39	.01	3.42	3.15	2.49	.01
Female friends in general	3.34	3.11	2.47	.01	3.34	3.10	2.40	.01
Closest friend	3.52	3.41	1.03	n.s.	3.38	3.39	0.40	n.s.
<u>Accessibility scores</u>								
All sources	3.85	3.82	0.03	n.s.	4.03	3.79	2.90	.01
Formal sources	4.17	4.08	1.00	n.s.	4.00	4.12	1.03	n.s.
Informal sources	3.78	3.73	0.48	n.s.	4.07	3.51	4.72	.01
Female friends in general	3.87	3.64	2.46	.01	4.01	3.77	2.51	.01
Closest friend	4.61	4.48	1.47	n.s.	4.78	3.54	6.47	.01

¹ Scale ranges from 1 to 5, 1 = low, 5 = high

² Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

TABLE 11
COMPARISONS BETWEEN PARTNERS' AND PARENTS' SUPPORT FOR
CONTRACEPTORS AND ABORTERS USE OF BIRTH CONTROL

Support	<u>NC</u>	<u>FAP</u>	<u>X²¹</u>	<u>p²<</u>	<u>EC</u>	<u>RAP</u>	<u>X²¹</u>	<u>p²<</u>
<u>Partner's Support</u> ³								
% helped	80.1	45.9	44.91	.01	72.4	56.6	8.13	.05
% had no effect	17.7	41.4			25.3	32.6		
% made it difficult	2.2	12.7			2.3	10.8		
<u>Mother's Support</u> ⁴								
% helped	37.4	25.5	6.38	.05	37.3	21.8	7.44	.05
% had no effect	38.0	50.4			48.0	50.0		
% made it difficult	24.6	24.1			14.7	28.2		
<u>Father's Support</u> ⁵								
% helped	4.8	6.8	2.32	n.s.	19.1	5.8	6.10	.05
% had no effect	72.3	71.0			70.0	76.1		
% made it difficult	22.9	22.2			10.9	18.1		

¹ Distributions add up to 100%

² 2 degrees of freedom

³ Sample sizes: NC = 197 FAP = 163 EC = 87 RAP = 145

⁴ Sample sizes: NC = 173 FAP = 138 EC = 65 RAP = 119

⁵ Sample sizes: NC = 122 FAP = 81 EC = 55 RAP = 72

APPENDIX A

PLANNED PARENTHOOD OF NEW YORK CITY, INC.

Planned Parenthood wants to learn more about how teenagers get their information about birth control, how they feel about the birth control methods, and why they pick the methods they use.

We would very much appreciate it, if you would volunteer to take part in this study while you're here today. The study involves: (1) completing this questionnaire while you are waiting to be called, and (2) answering some other questions in an interview before you leave.

Your answers will be kept strictly confidential, and will only be used by Planned Parenthood to help give you and other teenagers better services, so please help us by answering all the questions.

If you have any questions, feel free to ask the person who gave this to you. After finishing the questionnaire, please return it to that person.

Thanks.

CONFIDENTIAL

Computer Codes						Deck 1
Clinic:	BH	BX	CH	MS	SS	1/
No.:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	2-7/
Pt.:	NC	OC	FAP	RAP	0	8/
Date:	_____					

1. After each of these sentences, please circle the number that best describes how you feel about it.

	<u>agree</u> <u>strongly</u>	<u>agree</u>	<u>no</u> <u>opinion</u>	<u>dis-</u> <u>agree</u>	<u>disagree</u> <u>strongly</u>	
Using birth control makes sex less natural and less spontaneous.	1	2	3	4	5	9/
Using birth control isn't really necessary if you have sex only once in a while.	1	2	3	4	5	10/
I don't like the idea of using a birth control method that means I have to touch my body.	1	2	3	4	5	11/
I'd rather use a birth control method that only has to be used at the time I'm having sex.	1	2	3	4	5	12/
If it's meant for a woman to get pregnant, using birth control won't make any difference.	1	2	3	4	5	13/
A man should be willing to use a condom (rubber) if the woman asks him to.	1	2	3	4	5	14/
If a woman doesn't want to get pregnant and isn't using birth control at that time, she should say no to sex.	1	2	3	4	5	15/
A woman who is not having sex that often and wants to use birth control, should use a method other than the pill.	1	2	3	4	5	16/
I don't like the idea of using a birth control method that means leaving something inside me all the time.	1	2	3	4	5	17/
A man doesn't have to think or do anything about birth control, since it's the woman who gets pregnant.	1	2	3	4	5	18/
Using birth control every time I have sex can get so costly that it's easier to take chances on getting pregnant.	1	2	3	4	5	19/
Knowing I can get an abortion, makes me less careful about using birth control.	1	2	3	4	5	20/

2. After each sentence, please circle true (T), false (F), or don't know (DK). You're not expected to know all the answers, so don't worry about circling don't know (DK).

	<u>True</u>	<u>False</u>	<u>Don't Know</u>	
Douching right after sex usually kills all the sperm.	T	F	DK	21/
If a woman has certain medical conditions, it may not be safe for her to use the pill.	T	F	DK	22/
If a woman has side effects with one kind of pill, she may be able to use another kind of pill and not have side effects.	T	F	DK	23/
If a woman forgets to take her pill for 4 days in a row, she will still be fully protected if she just takes 2 pills a day for the next 4 days.	T	F	DK	24/
A woman cannot get pregnant for at least 3 months after she stops taking the pill, even if she doesn't use any other birth control method.	T	F	DK	25/
Generally, only a doctor can tell if a woman's IUD is still in place.	T	F	DK	26/
Foam should be put in about 2 hours before having sex.	T	F	DK	27/
The main reason for using contraceptive jelly with the diaphragm is to make it easier to put the diaphragm in.	T	F	DK	28/
The diaphragm should be taken out right after sex.	T	F	DK	29/
A woman's "safe days" are halfway between her monthly periods.	T	F	DK	30/
Sperm are released from the penis only when the man comes (ejaculates).	T	F	DK	31/
A rubber (condom) breaks very easily.	T	F	DK	32/
The rubber should be held in place on the penis while the man pulls out.	T	F	DK	33/
The rubber can be used more than once as long as you wash it and check it to see it's not broken	T	F	DK	34/
If a condom feels dry in use, it's a good idea to put vaseline on it.	T	F	DK	35/

3. Have you ever had sexual intercourse? Yes No
- If yes, please go to question 4.
If no, skip 4 and go to question 5.

36/

4. For each sentence, please circle the number that best tells how true it is for you.

	<u>Always</u>	<u>Often</u>	<u>Some- times</u>	<u>Not Often</u>	<u>Never</u>	
I know ahead of time when I'm going to have sex.	1	2	3	4	5	37/
I enjoy having sex.	1	2	3	4	5	38/
Taking a chance on getting pregnant makes sex exciting.	1	2	3	4	5	39/
I make sure ahead of time that we have a birth control method whenever we have sex.	1	2	3	4	5	40/
Using birth control is a real hassle.	1	2	3	4	5	41/
I worry about using some kinds of birth control because I've heard of possible side effects.	1	2	3	4	5	42/
I'd rather take a chance on getting pregnant than use a birth control method.	1	2	3	4	5	43/

5. For each of the methods listed, please circle the number that best tells what you think the chances are of getting pregnant using that method correctly.

<u>Chances of getting pregnant using:</u>	<u>None or almost none</u>	<u>Very Low</u>	<u>Low</u>	<u>About 50-50</u>	<u>High</u>	<u>Don't know</u>	
Condom - - - - -	1	2	3	4	5	DK	44/
Condom/Foam - - - - -	1	2	3	4	5	DK	45/
Diaphragm - - - - -	1	2	3	4	5	DK	46/
Douche - - - - -	1	2	3	4	5	DK	47/
Foam - - - - -	1	2	3	4	5	DK	48/
IUD - - - - -	1	2	3	4	5	DK	49/
No method at all - - - - -	1	2	3	4	5	DK	50/
Pill - - - - -	1	2	3	4	5	DK	51/
Rhythm - - - - -	1	2	3	4	5	DK	52/
Sterilization - - - - -	1	2	3	4	5	DK	53/
Withdrawal - - - - -	1	2	3	4	5	DK	54/

PLANNED PARENTHOOD OF NEW YORK CITY

COUNSELING NOTES

Date: _____

Chart #: _____

Cr: BH BX CH MS SS Serv: NCC OCC FAP RAP Other: _____

Lives with: Mother only Father only Both
 Other Specify: _____

Father: Last grade completed _____

Mother: Last grade completed _____

Brothers: # Older _____ # Younger _____

Sisters: # Older _____ # Younger _____

Family Religion: _____

Education/Career goals: _____

Age: _____
Race: W <input type="checkbox"/> B <input type="checkbox"/> PR <input type="checkbox"/> Oth: _____
Marital: Single <input type="checkbox"/> Married <input type="checkbox"/> Oth <input type="checkbox"/>
Last grade completed: _____
Student?: Yes <input type="checkbox"/> No <input type="checkbox"/>
Medicaid?: Yes <input type="checkbox"/> No <input type="checkbox"/>

Parent(s) Boyfriend

Who knows patient is here? Yes No Yes No

Will they be told? Yes No Yes No

Does anyone else know patient is here?
 Yes No (Identify) _____

(For abortion patients only):

Who is taking patient home? _____

If not boyfriend, does he know? _____

Yes Why didn't he come? _____

No Why doesn't he know? _____

NARRATIVE: (Include all relevant items, such as patient's relationship with others, her attitude about her sexual activity, the service she is seeking and use of birth control.)

About today's method:
Pt. plans to continue with: _____
Pt. plans to adopt: _____

PLANNED PARENTHOOD OF NEW YORK CITY

Cr: BH BX CH MS SS Serv: NC OC FAP RAP Oth _____ Chart # _____ Date _____

Age at first intercourse: _____ (IF NEVER HAD INTERCOURSE DO NOT CONTINUE WITH THIS FORM.)

When did patient start using B/C? Never At or before first intercourse
 (#) _____ of weeks or _____ (#) months after first intercourse.

I. RECORD CONTRACEPTIVE HISTORY: Record all methods patient used, in the order used, across the top of the grid. If patient used more than one method during a given period of time (for example, foam/condom or alternating between rhythm and withdrawal) list all methods used during the time period, treat them as one method, by putting them at the top of just one column.

If patient first used no method, list NONE as first method and ask starred questions 1, 3 and 7.

Start with first method(s) used; ask all questions for the method(s), then go to next method and ask all the questions for that method.

Methods Used In Order Of Use

	1. _____ (#) ___ wks ___ mths	2. _____ (#) ___ wks ___ mths	3. _____ (#) ___ wks ___ mths
*1 How long was method used?			
2a (If Pill) how often did pt. forget to take it?	<input type="checkbox"/> Always <input type="checkbox"/> most times <input type="checkbox"/> some times <input type="checkbox"/> rarely	<input type="checkbox"/> Always <input type="checkbox"/> most times <input type="checkbox"/> some times <input type="checkbox"/> rarely	<input type="checkbox"/> Always <input type="checkbox"/> most times <input type="checkbox"/> some times <input type="checkbox"/> rarely
b (If not Pill) how often was it used?			
*3 How often was pt. having sex?	(# times) ___ per wk ___ per mth ___ per yr	(# times) ___ per wk ___ per mth ___ per yr	(# times) ___ per wk ___ per mth ___ per yr
4 Any problems using method?	<input type="checkbox"/> Yes (discuss) <input type="checkbox"/> No	<input type="checkbox"/> Yes (discuss) <input type="checkbox"/> No	<input type="checkbox"/> Yes (discuss) <input type="checkbox"/> No
5 Has pt. ever stopped using method?	<input type="checkbox"/> Yes (continue) <input type="checkbox"/> No (skip to Q. 7)	<input type="checkbox"/> Yes (continue) <input type="checkbox"/> No (skip to Q. 7)	<input type="checkbox"/> Yes (continue) <input type="checkbox"/> No (skip to Q. 7)
6 Why did pt. stop?			
*7a Did pregnancy occur while using method? (IF YES TO ANY, SKIP TO II).	<input type="checkbox"/> Yes, method failed <input type="checkbox"/> Yes, pt. error <input type="checkbox"/> Yes, no method used <input type="checkbox"/> No	<input type="checkbox"/> Yes, method failed <input type="checkbox"/> Yes, pt. error <input type="checkbox"/> Yes, no method used <input type="checkbox"/> No	<input type="checkbox"/> Yes, method failed <input type="checkbox"/> Yes, pt. error <input type="checkbox"/> Yes, no method used <input type="checkbox"/> No
b Did pregnancy occur after stopped use?	<input type="checkbox"/> Yes, immediately <input type="checkbox"/> Yes, ___ wks later <input type="checkbox"/> No	<input type="checkbox"/> Yes, immediately <input type="checkbox"/> Yes, ___ wks later <input type="checkbox"/> No	<input type="checkbox"/> Yes, immediately <input type="checkbox"/> Yes, ___ wks later <input type="checkbox"/> No

II. PREGNANCY HISTORY (Put in chronological order, including today's abortion)

Date: _____	Outcome (include length gestation) _____	Who provided AB/natal service? _____	(If had AB) reason for AB/ not wanting child? _____	Were all methods offered? _____	Which method was adopted, if any? (If none, why?) _____
				Y N DK	

PLANNED PARENTHOOD OF NEW YORK CITY, INC.

T E E N I I S T U D Y

PART III

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Computer Codes					
Clinic:	BH	BX	CH	MS	SS
No.:					
Pt.:	NC	OC	FAP	RAP	O
Date:					

INTERVIEWER INSTRUCTIONSPART I: SELF-ADMINISTERED QUESTIONNAIRE.

ON THE BACK OF THE LAST PAGE OF PART I, STATE WHETHER OR NOT PATIENT WAS INTERVIEWED. IF SHE WAS NOT INTERVIEWED, EXPLAIN WHY.

PART II: COUNSELING NOTES FORMS.

FOR ABORTION PATIENTS, INDICATE ON THE BOTTOM OF PAGE 2 WHETHER OR NOT THE PATIENT ACTUALLY RECEIVED AN ABORTION, AND IF NOT WHY.

REVIEW THE COUNSELING NOTES TO BE SURE THAT ALL ITEMS HAVE BEEN COMPLETED. IF ANSWERS ARE NOT SPECIFIC ENOUGH (E.G., EXACT REASONS PREGNANCY OCCURRED OR ABORTION WAS CHOSEN), GO OVER THE QUESTION AGAIN WITH THE PATIENT AND ADD MORE DETAILED INFORMATION TO THE FORM. NOTE PATIENT'S CONTRACEPTIVE AND PREGNANCY HISTORY IN ORDER TO FILL IN SECTION 1. NOTING PATIENT'S LIVING SITUATION, RELATIONSHIP WITH PARENTS, AND RELATIONSHIP WITH PARTNER, WILL SPEED UP SECTIONS 3 AND 4 OF THE INTERVIEW.

PART III: INTERVIEW.

ASK ALL QUESTIONS UNLESS OTHERWISE INSTRUCTED. IF PATIENT HAS ALREADY ANSWERED A QUESTION WHILE RESPONDING TO A PREVIOUS QUESTION, SIMPLY RECORD THE ANSWER WITHOUT ASKING THE QUESTION. HOWEVER, IF THERE IS ANY DOUBT IN YOUR MIND, ASK THE QUESTION.

ITEMS IN CAPITALS ARE INSTRUCTIONS FOR YOU, AND ARE NOT READ ALOUD. READ TO THE PATIENT ONLY THOSE QUESTIONS AND ANSWERS THAT APPEAR IN --italics--. IN ANSWERING QUESTIONS, CIRCLE THE NUMBER OF THE CORRECT RESPONSE OR WRITE THE NUMBER IN THE BOX PROVIDED. WHEN CHOICES OF ANSWERS ARE IN --this type-- DO NOT READ THEM TO THE PATIENT: THE QUESTION IS OPEN ENDED. IF HER ANSWER MATCHES ONE OF THOSE LISTED, CIRCLE OR WRITE IN THE NUMBER OF THAT CHOICE. HOWEVER, YOU MAY READ SOME OF THE CHOICES WHEN PROBING FOR AN ANSWER. IF HER ANSWER DOES NOT FIT ANY OF THE CHOICES, WRITE DOWN HER EXACT REPLY IN THE "OTHER" SPACE, AND IT WILL BE CODED LATER. IF THERE IS ANY DOUBT IN YOUR MIND ABOUT HOW TO RECORD HER RESPONSE, WRITE IN HER EXACT REPLY.

UNLESS OTHERWISE STATED, RECORD ONLY ONE ANSWER PER QUESTION. IF PATIENT GIVES MORE THAN ONE ANSWER, ASK FOR THE MOST IMPORTANT.

WRITE IN ANY ADDITIONAL COMMENTS THE PATIENT MAY MAKE WHILE ANSWERING QUESTIONS, IF YOU FEEL THEY WILL HELP US UNDERSTAND HER ANSWERS.

AFTER YOU HAVE COMPLETED THIS INTERVIEW, CLIP TOGETHER THE QUESTIONNAIRE (PART I), ONE COPY OF EACH OF THE TWO PAGES OF THE COUNSELING NOTES (PART II), AND THE INTERVIEW ITSELF (PART III), AND RETURN THEM TO THE DESIGNATED BOX FOR EDITING AND CODING.

AFTER YOU HAVE TAKEN OUT PARTS I & II FROM THE CHART, PUT THE CHART BACK IN THE RACK SO THAT THE PATIENT CAN RECEIVE HER EXIT INTERVIEW.

SUGGESTED INTRODUCTION

When you came in today and answered the questionnaire, we mentioned that we would ask you some other questions before you left. This interview will only take about fifteen minutes, and most people find it interesting. All of your answers will be kept completely confidential, and will be used by Planned Parenthood to help give you, and other teenagers, better clinic services.

SECTION I: USE OF CONTRACEPTION

I'm going to ask you a few questions about your use of birth control.

1. After today, are you and your partner going to use a birth control method? 55 /

- Yes (ASK A) . . . 1
- No (ASK B) . . . 2
- Don't know. (ASK B) . . . 3

A. Which method? _____ (GO TO Q. 2) 56 /

B. What is the major reason you and your partner are not planning on using a method in the future? _____ 57 /

2. FROM COUNSELING NOTES AND PREVIOUS QUESTION, CIRCLE ALL METHODS PATIENT HAS AND WILL USE. THEN ASK QUESTION C FOR EACH METHOD. IF PATIENT NEVER USED A METHOD, AND IS NOT PLANNING ON USING ONE IN THE FUTURE, GO TO QUESTION 3.

A. IS HER METHOD THE SAME ONE SHE PLANNED TO ADOPT ACCORDING TO THE COUNSELING NOTES? 58 /

- Yes . . . 1
- No . . . 2

B. CIRCLE ALL METHODS PATIENT HAS USED AND WILL USE.	C. What is the <u>main</u> reason you chose (<u>method</u>) rather than another method (at the time)? WRITE IN CODES.
Pill 1	<input type="checkbox"/> <input type="checkbox"/>
IUD 2	<input type="checkbox"/> <input type="checkbox"/>
Dia-phragm 3	<input type="checkbox"/> <input type="checkbox"/>
Condom & Foam 4	<input type="checkbox"/> <input type="checkbox"/>
Condom 5	<input type="checkbox"/> <input type="checkbox"/>
Foam 6	<input type="checkbox"/> <input type="checkbox"/>
With-drawal 7	<input type="checkbox"/> <input type="checkbox"/>
Rhythm 8	<input type="checkbox"/> <input type="checkbox"/>
Other: 9	<input type="checkbox"/> <input type="checkbox"/>

IF NECESSARY, USE CATEGORIES AS PROBES.

CODES FOR C

01 easy to use	59-61/
02 most effective method I could use	
03 less worry about side effects	62-64/
04 doesn't spoil the pleasure	
05 hard for parents to find out	65-67/
06 don't need a doctor	
07 offers constant protection	68-70/
08 only have to use it when needed	
09 inexpensive	71-73/
10 made it boyfriend't responsibility	74-76/
11 it's what all my friends use	
90 Other: WRITE IN UNDER C	77-79/

80/ 1
 Deck 2: 1- 7/DU
 8-10/
 11-13/

IF PATIENT NEVER USED ANY METHOD (PRIOR TO FIRST PREGNANCY) ASK QUESTION 3, OTHERWISE GO TO INSTRUCTION BEFORE QUESTION 4.

3. *What is the main reason you haven't used (didn't use) a birth control method (before your pregnancy)?* USE CHOICES AS PROBES IF NECESSARY. 14-15/

Not sexually active before	01
Thought sex was too infrequent to get pregnant	02
Thought too young to get pregnant.	03
Embarrassed to go to Doctor/Clinic	04
Wanted to get pregnant	05
Didn't know where to get a method	06
Afraid of side effects	07
Partner against use of birth control	08
Other: _____	09

NOW SKIP TO SECTION 2

IF PATIENT USED A METHOD, BUT NEVER WENT TO A CLINIC OR DOCTOR FOR BIRTH CONTROL (PRIOR TO FIRST PREGNANCY), ASK QUESTION 4. OTHERWISE GO TO SECTION 2.

4. *What is the main reason you didn't go to a clinic or doctor for a birth control method (prior to your first pregnancy)?* USE CHOICES AS PROBES IF NECESSARY. 16 /

Sex too infrequent to need it	1
Embarrassed to go to Doctor/Clinic	2
Wanted to become pregnant	3
Didn't know where to get a method	4
Afraid of side effects	5
Other: _____	9

SECTION II SOURCES OF BIRTH CONTROL INFORMATION

SOME OF THE FOLLOWING QUESTIONS ASK FOR SOURCES OF INFORMATION AND INFLUENCE. ENTER THE SOURCE ON PAGE 5 AND INDICATE THE ANSWERS TO THE QUESTIONS IN THE NUMBERED COLUMNS. WHEN PATIENT SAYS 'friend' PROBE AS TO WHETHER FRIEND IS A CLOSE FRIEND OR JUST A FRIEND. ASK FOR SOURCES' FIRST NAMES (ESPECIALLY WITH FRIENDS), AND WRITE THEM IN.

5. *People learn all kinds of things about birth control methods in lots of different ways: from friends, relatives and other people; from magazines and books; from television; from school; and many other ways. I'm going to ask a few questions about where you got your information about birth control.*

- A. *How old were you when you first heard or read about birth control?* 17-18/
Age: _____
- B. *And where did you first learn or hear about birth control?* 19-20/

- C. *Since then, where else did you get information - either good or bad - about birth control? Who or where else..?PROBE FOR ALL SOURCES.*

IN THE GRID ON PAGE 5, INDICATE ALL OF THE PATIENT'S SOURCES OF INFORMATION BY PUTTING A CIRCLE AROUND THE #1 IN THE FIRST COLUMN NEXT TO THESE SOURCES. WHERE YOU HAVE THE FIRST NAME OF THE SOURCE, WRITE IT IN THE LIST OF SOURCES. INCLUDE THE FIRST SOURCE WHEN RECORDING.

PRIOR TO ASKING FOR THE MAIN TYPE OF INFORMATION EACH SOURCE GAVE ASK QUESTIONS 6 AND 7 WHICH ARE ON THE BACK OF THIS PAGE

6. Do you know anyone who is using or has used birth control? 21 /
- Yes . .(ASK A) 1
No . .(GO TO Q. 7) 2
- A. Has their use of birth control made a difference in how you feel about, or how you actually use birth control? 22 /
- Yes . .(ASK B) 1
No . .(GO TO Q. 7) 2
- B. Whose use has influenced you? Who else? INDICATE ALL OF THE PEOPLE WHOSE USE OF BIRTH CONTROL HAVE INFLUENCED THE PATIENT BY PUTTING A CIRCLE AROUND THE #2 NEXT TO THEIR NAMES.
7. Do you know anyone who has ever had an abortion? 23 /
- Yes . .(ASK A) 1
No . .(GO TO Q. 8) 2
- A. Has their having an abortion, in any way, made a difference in how you feel about abortion or pregnancy? 24 /
- Yes . .(ASK B) 1
No . .(GO TO Q. 8) 2
- B. Who? Who else? INDICATE ALL OF THE PEOPLE WHOSE ABORTIONS HAVE INFLUENCED THE PATIENT BY PUTTING A CIRCLE AROUND THE #4 NEXT TO THEIR NAMES.
8. COMPLETING THE GRID
- YOU WILL NOW ASK FOR THE TYPES OF INFORMATION THAT SOURCES GAVE TO THE PATIENT AS WELL AS THE TYPES OF INFLUENCES THE (1) SOURCES OF INFORMATION AND/OR (2) USES OF BIRTH CONTROL AND/OR (3) USES OF ABORTION HAVE HAD ON THE PATIENT'S ATTITUDE AND EXPERIENCES WITH BIRTH CONTROL, THEREFORE, ASK QUESTIONS A1 AND A2 FOR THOSE SOURCES WHO HAVE A NUMBER 1 CIRCLED (THAT IS GAVE THE PATIENT INFORMATION). ASK ONLY QUESTIONS B1 AND B2 FOR THOSE SOURCES WHO HAVE AT LEAST ONE NUMBER CIRCLED (EITHER 1, 2, OR 4). DO NOT ASK THESE QUESTIONS FOR ANYONE ELSE.
- A1. You mentioned you first heard about birth control from (first source). What was the most important thing that you heard from (first source)? You may want to use this card which lists some of the answers other people have given. If you use a choice on the card, just give me the number. If not, just tell me your answer. SHOW CARD 1 AND WRITE IN CODE FROM CARD IN GRID.
- A2. FOR EACH ADDITIONAL SOURCE OF INFORMATION, ASK: What was the most important thing that you heard or learned from (source)? SHOW CARD 1 AND WRITE IN CODE FROM CARD IN GRID. NOW GO TO QUESTIONS B1 AND B2.
- B1. FOR EACH SOURCE OF INFORMATION, ASK: What effect, if any, did getting information from (source) have on you? You may want to use this card which lists some ways people influence others. Give me the main way (source) influenced you. If you use a choice on the card, just give me it's number. If not, just give me your answer. SHOW CARD 2 AND WRITE IN CODE FROM CARD IN GRID.
- B2. FOR EACH OTHER SOURCE OF INFLUENCE, ASK: What effect did (source's) use of birth control/abortion have on you? SHOW CARD 2. WRITE CODE IN GRID.

GRID	Provided information.		Used B/C with in-fluence	Had A/B with in-fluence	Influence Number	Knowledge grade	Accessibility grade	
	Yes?	Type						
1. close friend_____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			25-33/
2. close friend_____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			34-42/
3. friend _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			43-51/
4. friend _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			52-60/
5. sister _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			61-69/
6. relative _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			70-78/ 79-80/02
7. partner/boyfriend	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			Deck 3: 1- 7/DUP 8-16/
8. (step) mother*	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			17-25/
9. (step) father*	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			26-34/
10. guardian*	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			35-43/
11. sex ed/hyg teacher**	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			44-52/
12. books/pamphlets**	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			53-61/
13. Planned Parenthood	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			62-70/
14. previous B/C provider***1		<input type="checkbox"/>	2	4	<input type="checkbox"/>			71-79/ 80/ 3
15. previous A/B provider***1		<input type="checkbox"/>	2	4	<input type="checkbox"/>			Deck 4: 1- 7/DUP 8-16/
16. Other: _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			17-25/
17. Other: _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			26-34/
18. Other: _____	1	<input type="checkbox"/>	2	4	<input type="checkbox"/>			35-43/
19. male friends in general								44-45/
20. female friends in gen.								46-47/
21. you (patient)								48-49/

ASK FOR GENERAL LEVEL OF KNOWLEDGE AND ACCESSIBILITY

WHEN COMPLETING THE KNOWLEDGE AND ACCESSIBILITY RATINGS:

*Ask only those that are relevant for patient.

**Ask only if patient mentioned it as information source.

***If patient never had A/B or used prescription methods before today, do not ask.

If it's a PPNYC clinic don't ask, just write in PPNYC rating.

IMPORTANT: WRITE ALL "OTHER" ANSWERS ON THE BOTTOM OF THIS PAGE.

9. Was sex education ever taught in any of your classes? 50/

Yes . . (ASK A) 1
 No . . (GO TO Q. 10) 2

A. Were birth control methods mentioned in any of these classes? 51/

Yes . . (ASK B) 1
 No . . (GO TO Q.10) 2

B. In which grades were birth control methods mentioned? In what other grades? CIRCLE GRADES THEN ASK C&D FOR EACH GRADE MENTIONED.	C. In terms of helping someone use B/C, would you say the class was very good, good, fair, poor or very poor?					D. In class did you learn where to get birth control?		
	VG	G	F	P	VP	Yes	No	
6th or less	1	2	3	4	5	1	2	52-53/
7th	1	2	3	4	5	1	2	54-55/
8th	1	2	3	4	5	1	2	56-57/
9th	1	2	3	4	5	1	2	58-59/
10th	1	2	3	4	5	1	2	60-61/
11th	1	2	3	4	5	1	2	62-63/
12th	1	2	3	4	5	1	2	64-65/

SECTION III: BOYFRIEND'S INFLUENCE

10. I'd like to ask you some questions about your most recent steady partner or your boyfriend. Do you have, or have you ever had one? BEFORE CIRCLING NO, ASK: Are you sure? 66/

Yes . . (ASK A) 1
 No . . (GO TO Q. 20) 2

A. Would you call him your partner or your boyfriend?

WHICHEVER SHE CHOOSES, USE IN ALL FUTURE QUESTIONS.

11. Have you and your partner/boyfriend ever talked about birth control? 67/

Yes . . (GO TO Q. 12) 1
 No . . (ASK Q. A) 2

A. What is the main reason you haven't talked about it? 68-69/

Not sexually active 01
 Patient too embarrassed 02
 Boyfriend too embarrassed 03
 Patient believes it's not her responsibility 04
 Boyfriend believes it's not his responsibility 05
 Patient believes it interferes with enjoyment of sex 06
 Boyfriend believes it interferes with enjoyment of sex 07
 Other: _____ 09

B. In the future, if there was a problem with a birth control method you or he were using, do you feel you could talk with him about it? 70/

- Yes 1
- No 2
- Don't know 3

NOW SKIP TO Q. 15

12. Who brought the subject up? 71/

- You, 1
- Your partner/boyfriend, 2
- Or, both of you? 3

13. How important is it to your partner/boyfriend that you be protected against getting pregnant? 72/

- Very important, 1
- Important, 2
- Somewhat important, 3
- Not important, 4
- Or, not important at all?. 5
- Don't know 9

14. When you talk about birth control with your partner/boyfriend, what is the main thing you talk about? SHOW CARD 1 & WRITE IN # / / 73-74/ IF OTHER, WRITE IT IN _____

15. How willing is he to use a rubber (condom): 75/

- Very willing 1
- Willing 2
- Somewhat willing 3
- Not too willing, 4
- Or, never willing? 5

16. What is his main feeling about your use of other birth control methods? USE CHOICES AS PROBES IF NECESSARY. 76-77/

- No opinion 01
- Doesn't like messy methods 02
- Concerned about side effects 03
- Won't allow use of a method with possible side effects 04
- Doesn't like a method that is used during intercourse 05
- Opposed to the use of any method because _____ 06
- Other: _____ 09

17. Would you say your partner/boyfriend helped, had no effect, or made it difficult for you to use birth control? 78/

- Helped 1
- Had no effect 2
- Made it difficult 3

17a. IF HE HELPED OR MADE IT DIFFICULT, ASK: What was the most important way that he influenced your use of birth control? SHOW CARD 2; WRITE IN CODE. IF NOT APPLICABLE, WRITE IN "99". . . .

18. ASK ABORTION PATIENTS ONLY: OTHERS SKIP TO Q. 19.

Does your partner/boyfriend know you're having an abortion today?		79/
Yes . . .(ASK A)	1	<hr/> 80/ 4
No . . .(GO TO Q. 19)	2	Deck 5
		<hr/> 1-7/ DUP
A. Is he in favor of it, have mixed feelings about it, or opposed to it?		8/
In favor	1	
Mixed feelings	2	
Opposed	3	

19. Do you expect to continue your relationship with your partner/boyfriend in the future?		9/
Yes	1	
No	2	
Don't know	3	

SECTION IV: PARENT(S) AS SOURCE OF INFORMATION

I am going to ask you some questions now about your parents or guardian.

20. Who are you currently living with?		10-11/
(step) mother only	01	
(step) father only	02	
both (step) mother/father	03	
boyfriend	04	
husband	05	
girlfriend	06	
alone	07	
guardian	08	
other (specify): _____	09	

IF PATIENT IS LIVING WITH A PARENT OR GUARDIAN, SKIP TO Q. 22

21. IF PATIENT IS NOT CURRENTLY LIVING WITH A PARENT OR GUARDIAN, ASK:

Were you living with a parent or guardian at any time while you were sexually active? 12/

Yes . . .(ASK A)	1
No . . .(ASK B)	2

A. Who were you living with? WRITE IN APPROPRIATE CODE FROM Q. 20, AND THEN GO TO Q. 22. 13-14/

B. When you were 13 or 14 who did you live with? WRITE IN APPROPRIATE CODE FROM Q. 20, AND SKIP TO Q. 28. 15-16/

22. IN THE FOLLOWING QUESTIONS, ASK ONLY THOSE THAT APPLY TO THE PATIENT'S PAST OR PRESENT LIVING SITUATION. USE THE PARENT OR GUARDIAN'S NAME, OR THEIR RELATIONSHIP TO THE PATIENT WHEN REFERRING TO THEM.

On the whole, how do (did) you get along with your parent(s)/guardian: 17/

- very well, 1
- well, 2
- okay, 3
- poorly, 4
- or, very poorly? 5

23. Have you ever talked about birth control with your _____:

	Yes	No	
Mother?	1	2	18/
Father?	1	2	19/
Guardian?	1	2	20/

IF YES TO ANY, ASK A. OTHERWISE, GO TO Q. 24.

A. Who first brought up the subject of birth control: 21/

- you, 1
- your parents/guardian, 2
- or both of you? 3

B. When you talk(ed) about birth control with your _____: what is (was) the main thing you talk(ed) about?

SHOW PATIENT CARD 1 AND WRITE IN NUMBER. IF NOT APPLICABLE, WRITE IN 99. IF OTHER, WRITE IT IN.

	CODES	
mother _____	/ /	22-23/
father _____	/ /	24-25/
guardian _____	/ /	26-27/

24. YOU KNOW FROM THE COUNSELING NOTES, WHETHER THE PATIENT HAS EVER HAD SEX. IF SHE HAS NOT HAD SEX, GO TO Q. 25.

Does (did) your _____ know you were (are) having sex?

	Yes	No	Don't know	
mother	1	2	3	28/
father	1	2	3	29/
guardian	1	2	3	30/

IF YES TO ANY, ASK A, OTHERWISE GO TO Q. 25.

A. How did your _____ find out you were sexually active?

	CODES	
mother _____		<input type="checkbox"/>
father _____		<input type="checkbox"/>
guardian _____		<input type="checkbox"/>

- | CHOICES: MAY BE USED AS PROBES | |
|--------------------------------|-----|
| 1. pt. volunteered information | 31/ |
| 2. they asked patient | 32/ |
| 3. someone else told them | 33/ |
| 4. accidentally found method | |
| 5. searched for pt's method | |
| 6. other: WRITE IT IN | |
| 9. NOT APPLICABLE | |

B. How do you think your _____ feels about your being sexually active? Does she/he accept it, have mixed feelings, or feel angry and upset about it?

	Accept	Mixed Feelings	Angry & Upset	DK	
mother	1	2	3	4	34/
father	1	2	3	4	35/
guardian	1	2	3	4	36/

25. ASK IF EITHER PARENT/GUARDIAN DOES NOT KNOW OF PATIENT'S SEXUAL ACTIVITY, OR IF PATIENT HAS NEVER BEEN SEXUALLY ACTIVE. OTHERS GO TO Q. 26.

How do you think your _____ would feel, if she/he knew you were having sex? Would she/he accept it, have mixed feelings, or feel angry and upset about it?

	Accept	Mixed Feelings	Angry & Upset	DK	
mother	1	2	3	4	37/
father	1	2	3	4	38/
guardian	1	2	3	4	39/

26. Do you think your _____ has helped, had no effect, or made it difficult for you to use birth control?

	Helped	No Effect	Difficult	
mother	1	2	3	40/
father	1	2	3	41/
guardian	1	2	3	42/

IF NO EFFECT FOR ALL APPLICABLE, SKIP TO Q. 28.

27. What was the most important way that your _____ influenced your use of birth control? SHOW PATIENT CARD 2 AND WRITE IN CODE. IF NOT APPLICABLE WRITE IN 99.

	CODES	
mother	<input type="checkbox"/>	43-44/
father	<input type="checkbox"/>	45-46/
guardian	<input type="checkbox"/>	47-48/

SECTION V: OTHER SOURCES OF INFORMATION

I am going to ask you some questions now about other people you may talk to about birth control.

28. Have you ever talked about birth control with your friends? 49/
 Yes . . (ASK A) 1
 No . . (GO TO Q. 29) 2
- A. Would you say you talk about it with: 50/
 only a best friend, 1
 a few, very close friends, 2
 some friends, 3
 or, most friends & acquaintances? . 4
- B. In general, how often do you talk about birth control with them: 51/
 very often, 1
 often, 2
 sometimes, 3
 not often, 4
 or, rarely? 5
- C. In general, what is the main thing you talk about with them?
 SHOW CARD 1 AND WRITE IN NUMBER, IF OTHER, WRITE IT IN: 52-53/
 OTHER
29. How many girls around your age do you think are having sex? 54/
 all or almost all, 1
 more than half, 2
 half, 3
 less than half, 4
 or, almost none? 5
30. How many boys around your age do you think are having sex: 55/
 all or almost all, 1
 more than half, 2
 half, 3
 less than half, 4
 or, almost none? 5
31. If you had a question about birth control, who or where would you probably turn to for information? 56-57/

32. What is the main reason you would turn to (source). HEREAFTER REFERRED TO AS SOURCE A. USE CHOICES AS PROBES IF NECESSARY. 58-59/
 Easy to contact 01
 Person understands my situation 02
 Person would keep it confidential 03
 Most knowledgeable person known 04
 Would rather talk than read 05
 Would rather read than talk 06
 Has had experience with B/C 07
 Other: _____ 09

33. *Of all the people and places you know you can get birth control information from, who probably knows the most about it?* _____ 60-61/
 _____ HEREAFTER REFERRED TO AS SOURCE B .

34. ARE SOURCES A AND B IDENTICAL? 62/

- Yes . . (GO TO Q. 35) 1
- No . . (ASK A) 2

A. *You said (Source B) knows the most about birth control, but you would turn to (Source A) for information. What is the main reason you would turn to (Source A) rather than (Source B)?* 63-64/

CHOICES

- Easier to contact 01
- Better understands my situation 02
- More likely to keep it confidential 03
- More knowledgeable 04
- Would rather talk than read 05
- Would rather read than talk 06
- More experienced with birth control 07
- Hassle using doctor/clinic 08
- Other: _____ 09

35. IF PLANNED PARENTHOOD WAS MENTIONED AS A SOURCE TO GO TO FOR INFORMATION IN QUESTIONS 31 OR 33, GO TO QUESTION 36. IF PLANNED PARENTHOOD WAS NOT MENTIONED, ASK:

What's the main reason you didn't mention Planned Parenthood as a place you would turn to for information? -65/

- Thought PPNYC was just for getting an abortion or a method 1
- Takes too long to get served 2
- Staff aren't sensitive to my feelings 3
- Didn't know I could just call for information 4
- Prefer a private doctor's opinion 5
- Other: _____ 9

36. WHEN COMPLETING THE GRID'S KNOWLEDGE AND ACCESSIBILITY COLUMNS, HAVE THE PATIENT RATE ALL SOURCES LISTED EXCEPT THOSE NOT RELEVANT TO HER LIFE SITUATION. GRID IS ON PAGE 5.

I'm going to read you a list of people who might be able to help you, if you had a question about birth control. I want you to grade them on how much you think they know about birth control, and how easy you feel it is to approach them for information: SHOW CARD 3 & WRITE IN CODES. SEE FOOTNOTES ON GRID BEFORE ASKING ABOUT EACH SOURCE.

37. *Has anyone recently asked you for advice or information on birth control?* 67/

- Yes . . (ASK A) 1
- No . . (GO TO Q. 38) 2

A. Were you able to give her/him the information they wanted? 68/

Yes . . . (ASK B) 1
No . . . (GO TO Q. 38) 2

B. What is the main information she/he wanted? SHOW CARD 1 AND 69-70/
WRITE IN NUMBER. IF OTHER WRITE IT IN.

OTHER _____ CODE

--	--

C. Did she/he use your information? 71/

Yes 1
No 2
DK 3

38. Compared with your friends, are you more likely, as likely, or less 72/
likely to be asked for advice and information on birth control?

more likely 1
as likely 2
less likely 3

39. Without being asked for it, have you recently offered advice or in- 73/
formation on birth control to anyone?

Yes . . . (ASK A) 1
No . . . (GO TO Q. 41) 2

A. What is the main information you offered her/him? SHOW CARD 1 74-75/
AND WRITE IN NUMBER. IF OTHER WRITE IT IN.

OTHER _____ CCDE

--	--

B. Did she/he use your information? 76/

Yes 1
No 2
DK 3

40. Compared to your friends, are you more likely, as likely, or less 77/
likely to offer advice and information on birth control?

more likely 1
as likely 2
less likely 3

41. In general, do you think people would feel more comfortable talking about birth control if they learned about it from:

<u>PLACE</u>	<u>Yes</u>	<u>No</u>	<u>Doesn't matter</u>	
School?	1	2	3	8/
Friends?	1	2	3	9/
Parents?	1	2	3	10/
Where else? _____	1	2	3	11/

This is the end of the interview. Thank you very much for your help and cooperation. Do you have any questions or comments about anything we've talked about? Do you have any other ideas on how to help teen-agers?
ANSWER THEIR QUESTIONS AND RECORD PERTINENT COMMENTS.

Thanks again!

Interviewer's Signature

ADDITIONAL COMMENTS:

APPENDIX B

ABORTERS' AND CONTRACEPTORS' ATTITUDES CONCERNING
THE USE OF BIRTH CONTROL METHODS

ATTITUDE QUESTIONS	Mean Scores				Mean Scores			
	NC ¹	FAP ¹	t	p<	EC ¹	RAP ¹	t	p<
<u>Group A²</u>								
1. Using birth control makes sex less natural and less spontaneous.	3.71	3.38	3.08	.01	4.22	3.77	3.44	.01
2. I don't like the idea of using a birth control method that means I have to touch my body.	3.97	3.57	3.62	.01	4.14	3.70	3.05	.01
3. I'd rather use a birth control method that only has to be used at the time I'm having sex.	3.36	2.95	3.24	.01	3.92	3.50	2.63	.01
4. Using birth control isn't really necessary if you have sex only once in a while	4.46	3.93	3.08	.01	4.66	4.22	4.63	.01
5. Using birth control every time I have sex can get so costly that its easier to take chances on getting pregnant.	4.57	4.15	4.68	.01	4.66	4.15	3.94	.01
6. If it's meant for a woman to get pregnant, using birth control won't make any difference.	4.28	3.90	3.51	.01	4.40	3.72	4.49	.01
7. A man doesn't have to think or do anything about birth control, since its the woman who gets pregnant.	4.36	4.06	2.24	.05	4.37	3.99	2.40	.01
8. I don't like the idea of using a birth control method that means leaving something inside me all the time.	2.80	2.43	2.88	.01	2.60	2.67	0.44	n.s.

APPENDIX B (CONTINUED)

ATTITUDE QUESTIONS	Mean Scores				Mean Scores			
	NC ¹	FAP ¹	t	p<	EC ¹	RAP ¹	t	p<
9. Knowing I can get an abortion makes me less careful about using birth control.	4.42	4.31	1.25	n.s.	4.69	4.33	3.37	.01
10. A woman who is not having sex that often and wants to use birth control should use a method other than the pill.	2.49	2.59	0.87	n.s.	2.80	2.70	0.76	n.s.
11. If a woman doesn't want to get pregnant and isn't using birth control at that time, she should say no to sex.	2.47	2.65	1.50	n.s.	2.43	2.44	0.12	n.s.
12. A man should be willing to use a condom (rubber) if the woman asks him to.	1.84	1.80	0.54	n.s.	1.90	1.87	0.22	n.s.
<u>Group B³</u>								
1. I'd rather take a chance on getting pregnant than use a birth control method.	4.81	4.51	3.05	.01	4.88	4.65	2.53	.05
2. I know ahead of time when I'm going to have sex.	2.81	3.04	1.97	.01	2.63	3.06	3.68	.01
3. I make sure ahead of time that we have a birth control method whenever we have sex.	2.87	3.59	1.07	.01	1.35	3.02	10.60	.01
4. Using birth control is a real hassle.	4.03	3.76	4.70	.05	4.23	3.83	2.61	.01
5. I enjoy having sex.	1.89	2.06	4.74	n.s.	1.68	2.00	2.55	.01
6. Taking a chance on getting pregnant makes sex exciting.	4.78	4.80	5.10	n.s.	4.85	4.64	1.98	.05
7. I worry about using some kinds of birth control because I've heard of possible side effects.	2.62	2.59	3.09	n.s.	2.86	2.59	1.71	n.s.

APPENDIX B (CONTINUED)

¹Group designations and sample sizes are:

NC = new contraceptors: 197 subjects for group A and 148 for group B

FAP = first aborters: 163 subjects for all questions

EC = effective contraceptors: 87 subjects for all questions

RAP = repeat aborters: 145 subjects for all questions

²Range: 1 = agree strongly, 2 = agree, 3 = neutral, 4 = disagree, 5 = disagree strongly.

³Range: 1 = always, 2 = often, 3 = sometimes, 4 = not often, 5 = never.

APPENDIX C

ABORTERS' AND CONTRACEPTORS' KNOWLEDGE ABOUT
HOW TO USE CONTRACEPTIVE METHODS

<u>Knowledge Questions</u>		<u>NC¹</u>	<u>FAP¹</u>	<u>X²²</u>	<u>p<</u>	<u>EC¹</u>	<u>RAP¹</u>	<u>X²²</u>	<u>p<</u>
<u>PILL</u>									
If a woman has side effects with one kind of pill, she may be able to use another kind of pill and not have side effects	C ³	67.0%	62.3%	3.05	.05	88.4%	73.4%	11.68	.01
	I	5.6	10.5			0.0	11.2		
	DK	27.4	27.2			11.6	15.4		
A woman cannot get pregnant for at least 3 months after she stops taking the pill, even if she doesn't use any other birth control method	C	52.0%	52.0%	4.26	n.s.	62.1%	59.4%	.36	n.s.
	I	6.1	1.9			5.7	7.7		
	DK	41.9	46.1			32.2	32.9		
If a woman forgets to take her pill for 4 days in a row, she will still be fully protected if she just takes 2 pills a day for the next four days	C	58.2%	50.3%	3.20	n.s.	70.1%	58.0%	3.48	n.s.
	I	8.7	7.4			6.9	11.2		
	DK	33.1	42.3			23.0	30.8		
If a woman has certain medical conditions, it may not be safe for her to use the pill	C	91.9%	84.6%	7.25	n.s.	96.6%	88.7%	4.34	n.s.
	I	3.6	3.0			1.1	3.5		
	DK	4.5	12.4			2.3	7.8		

APPENDIX C (CONTINUED)

<u>Knowledge Questions</u>		<u>NC¹</u>	<u>FAP¹</u>	<u>X²²</u>	<u>p<</u>	<u>EC¹</u>	<u>RAP¹</u>	<u>X²²</u>	<u>p<</u>
<u>IUD</u>									
Generally, only a doctor can tell if a woman's IUD is still in place	C	25.0%	29.0%	5.85	n.s.	36.0%	45.0%	1.91	n.s.
	I	37.2	25.3			24.5	22.9		
	DK	37.8	45.7			39.5	32.1		
<u>DIAPHRAGM</u>									
The main reason for using contraceptive jelly with the diaphragm is to make it easier to put the diaphragm in	C	61.4%	42.0%	13.55	.01	67.4%	56.8%	2.69	n.s.
	I	13.2	21.0			11.6	17.4		
	DK	25.4	37.0			21.0	25.8		
The diaphragm should be taken out right after sex	C	59.5%	54.0%	1.23	n.s.	66.7%	57.3%	5.05	n.s.
	I	6.7	8.7			5.7	15.4		
	DK	33.8	37.3			27.6	27.3		
<u>CONDOM/RUBBER</u>									
If a condom feels dry in use, it's a good idea to put vaseline on it	C	24.4%	20.6%	5.86	n.s.	34.9%	18.2%	8.17	.05
	I	40.1	31.3			31.4	37.8		
	DK	35.5	48.1			33.7	44.0		
A rubber (condom) breaks very easily	C	41.5%	31.3%	4.76	n.s.	38.8%	31.0%	1.71	n.s.
	I	33.3	43.1			32.9	40.1		
	DK	25.2	25.6			28.3	28.9		
The rubber should be held in place on the penis while the man pulls out	C	65.1%	63.1%	1.83	n.s.	74.4%	61.3%	4.14	n.s.
	I	7.7	4.8			4.7	7.0		
	DK	27.2	32.1			20.9	31.7		

APPENDIX C (CONTINUED)

<u>Knowledge Questions</u>		<u>NC¹</u>	<u>FAP¹</u>	<u>X²²</u>	<u>p<</u>	<u>EC¹</u>	<u>RAP¹</u>	<u>X²²</u>	<u>p<</u>
<u>CONDOM/RUBBER (continued)</u>									
The rubber can be used more than once as long as you wash it and check to see it's not broken	C	14.7%	15.5%	.30	n.s.	12.6%	15.5%	1.80	n.s.
	I	72.1	69.6			70.1	73.2		
	DK	13.2	14.9			17.3	11.3		
<u>OTHER METHODS</u>									
Douching right after sex usually kills all the sperm	C	71.8%	61.7%	7.77	.05	86.2%	72.3%	6.07	.05
	I	8.2	5.6			3.4	8.5		
	DK	20.0	32.7			10.4	19.2		
Sperm are released from the penis only when the man comes (ejaculates)	C	55.2%	43.2%	5.36	n.s.	74.7%	49.3%	15.38	.01
	I	35.6	46.9			20.7	45.8		
	DK	9.2	9.9			4.6	4.9		
A woman's "safe days" are halfway between her monthly periods	C	54.8%	40.4%	7.52	n.s.	51.8%	37.5%	4.58	n.s.
	I	23.4	32.3			22.4	31.3		
	DK	21.8	27.3			25.8	31.2		
Foam should be put in about two hours before having sex	C	32.6%	38.5%	1.80	n.s.	43.7%	47.2%	0.27	n.s.
	I	15.0	16.1			13.8	12.7		
	DK	52.4	45.4			42.5	40.1		

¹ Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

² 2 degrees of freedom

³ Distributions add up to 100%

C = Correct I = Incorrect D = Don't know

APPENDIX D

ABORTERS' AND CONTRACEPTORS' ESTIMATES OF THE CHANCES
OF GETTING PREGNANT USING BIRTH CONTROL¹

	Mean Scores				Mean Scores			
	NC ²	FAP ²	t	p<	EC ²	RAP ²	t	p<
Chances of getting pregnant using:								
Number of times could not give estimate.	1.40	2.45	3.20	.01	0.61	1.88	3.88	.01
Pill	1.46	1.88	3.41	.01	1.41	1.78	2.42	.05
IUD	2.06	2.41	2.30	.01	2.45	2.20	1.46	.05
Diaphragm	2.26	2.51	1.94	n.s.	2.63	2.67	0.27	n.s.
Condom/foam	2.73	2.76	0.23	n.s.	2.92	3.04	0.68	n.s.
Condom	3.37	3.22	1.12	n.s.	3.63	3.53	0.58	n.s.
Foam	4.06	3.72	2.70	.01	3.92	3.89	0.16	n.s.
Rhythm	4.45	4.17	2.37	.05	4.35	4.27	0.52	n.s.
Withdrawal	4.24	4.03	1.31	n.s.	4.56	4.12	2.46	.05
Douche	4.67	4.33	2.73	.01	4.84	4.47	2.66	.01
Sterilization	1.25	4.03	1.31	n.s.	1.25	1.21	0.34	n.s.
No method at all	4.83	4.74	1.13	n.s.	4.91	4.75	1.48	n.s.

¹Range: 1 = none or almost none, 5 = high

²Group designations and sample sizes are:
 NC = new contraceptors: 197 subjects
 FAP = first aborters: 163 subjects
 EC = effective contraceptors: 87 subjects
 RAP = repeat aborters: 145 subjects

REFERENCES

- Addams, J., Adolescent sexuality. Journal of Clinical Child Psychology. 1974, 3.3, 3-70.
- Adler, N., Factors affecting contraceptive use. Unpublished paper. Presented at American Psychological Association Annual Meeting, 1974.
- Allport, G. and Postman, L., The psychology of rumor. New York: Hold, Rinehart and Winston, 1940.
- Asch, S., Effects of group pressures upon the modification and distortion of judgments. In Swanson, Newcomb and Hartley, (Ed.) Readings in social psychology. New York: Holt, Rinehart and Winston, 1952.
- Back, K., Influence through social communication. In Swanson, Newcomb and Hartley, (Eds.). Readings in social psychology. New York: Holt, Rinehart and Winston, 1952.
- Bakker, C. and Dightman, C., Psychological factors in fertility control. Fertility and Sterility. 1964, 15, 559-567.
- Bardwick, J., Psychological factors in the acceptance and use of oral contraceptives. In J. Fawcett, (Ed.). Psychological perspectives on population. New York: Basic Books, 1973, 274-305.
- Barglow, D., Abortion in 1975: The psychiatric perspective. Journal of Obstetrics and Gynecological Nursing. January/February, 1976, 41-48.
- Beal, G. and Bohlen, J., The adoption and diffusions of ideas in agriculture. In D.J. Bogue, (Ed.) Mass communication and motivation for birth control. Chicago University; Chicago Community and Family Study Center, 1967, 78-95.
- Behrman, S., Corsa, L. Jr., and Freedman, R. (Eds.), Fertility and family planning: A world view. Ann Arbor: University of Michigan Press, 1971.
- Berelson, B. and Morris, J. (Eds.), Reader in public opinion and communication. Glencoe, Illinois: Free Press, 1950.
- Berelson, B., Lazarsfeld, P. and McPhee, D., Voting: A study of opinion formation in a presidential campaign. Chicago: University of Chicago Press, 1954.

REFERENCES (CONTINUED)

- Berelson, B., On family planning communication. In D. Bogue (Ed.). Mass communication and motivation for birth control. University of Chicago: Community and Family Planning Center, 1967.
- Bogue, D., Mass communication and motivation for birth control. University of Chicago Communications and Family Planning Center, 1967.
- Burke, R. and Weir, T., Benefits to adolescents of informal helping relationships with their parents and peers. Unpublished paper, 1976.
- Cahn, J., Adolescents' needs regarding family planning services. Journal of Sex Research August, 1977, 13, 3, 210-222.
- Cahn, J., A preliminary report on abortions. Unpublished manuscript, 1975.
- Cahn, J., Understanding repeat abortions. Planned Parenthood National Executive Directors Council Papers, 1976.
- Caplan, G., Support systems and community mental health. New York: Behavioral Press, 1974.
- Cernada, G., and Crawford, T., Some practical applications of social psychology to family planning programs. In J. Fawcett, (Ed.) Psychological Perspectives on Population. New York: Basic Books, 1972.
- Chilman, C. Fertility and poverty in the United States: Some implications for family planning programs, evaluation and research. Journal of Marriage and the Family. 1968, 30, 207-227.
- Chilman, C., Selected social and psychological variables associated with premarital coitus and contraceptive behaviors of single male and female college freshmen. Presented at American Psychological Association Annual Meeting, 1975.
- Cicourel, A., Fertility, family planning and the social organization of family life: Some methodological issues. The Journal of Social Issues. 1967, 23, 57-81.
- Clark, A., A systems approach to the therapeutic community and the delivery of mental health services. In R. Hirschowitz and B. Levy, (Eds.). The changing mental health scene. New York: Spectrum Publishers, Inc., 1976, 277-289.

REFERENCES (CONTINUED)

- Clausen, J.A., Family structure, socialization and personality. In L.W. Hoffman and M.L. Hoffman, (Eds.). Review of child development research. New York: Russell Sage Foundation, 1966, 2, 1-53.
- Coblner, W., Pregnancy in the single adolescent girl: The role of cognitive functions. Journal of Youth and Adolescence. 1974, 3,1, 17-29.
- Coblner, W., Teenage out-of-wedlock pregnancy: A phenomenon of many dimensions. Bulletin of the New York Academy of Medicine. 1970, 46, 438-447.
- Coblner, W., Schulman, H., and Romney, S., The termination of adolescent out-of-wedlock pregnancy and the prospects for their primary prevention. American Journal of Obstetrics and Gynecology. 1973, 115, 432-444.
- Coblner, W., and Schulman, H., Patterns of contraceptive failures: The role of motivation re-examined. Journal of Biological Science. 1975, 7, 307-318.
- Coleman, J., Katz, E., and Menzel, H., The diffusion of an innovation among physicians. Sociometry. 1957, 20, 253-270.
- David, H., Psychological studies in abortion. In J. Fawcett, (Ed.). Psychological perspectives on population. New York: Basic Books, 1973, 241-273.
- Devereux, G., A psychoanalytic study of contraception. Social Research Committee of Planned Parenthood Federation of America. 1960.
- Dryfoos, J., Women who need and receive family planning services. Estimates at mid-decade. Family Planning Perspectives, 1975, 7, 4, 172-179.
- Eisenstadt, S., Communication processes among immigrants in Israel. Public Opinion Quarterly. 1952, 16, 42-58.
- Fawcett, J., Psychology and population. New York: Population Council, 1970.
- Festinger, L., Schacter, S. and Back, K., Social pressure in informal groups. New York: Harpers and Brothers, 1950.
- Fordney Settlege, D., Baroff, S., and Cooper, D., Sexual experience of younger teenage girls seeking contraceptive assistance for the first time. Family Planning Perspectives. 1973, 5, 4, 223-226.

REFERENCES (CONTINUED)

- Furie, S., Birth control and the lower class unmarried mother. Social Work. 1966, 11, 42-49.
- Furstenberg, F., Jr., Birth control experience among pregnant adolescents. The process of unplanned parenthood. Social Problems. 1971, 19, 192-203.
- Furstenberg, F., Jr., Preventing unwanted pregnancies among adolescents. Journal of Health and Social Behavior. 1971, 340-347.
- Furstenberg, F., Jr., Attitudes toward abortion among young blacks. Studies in Family Planning. 1971, 3-66+.
- Furstenberg, F., Jr., Gordis, L., and Markowitz, M., Birth control knowledge and attitudes among unmarried pregnant adolescents: A preliminary report. Journal of Marriage and the Family. 1969, 31, 34-42.
- Furstenberg, F., Jr., Masnick, and Ridetts, S., How can family planning programs delay repeat teenage pregnancies? Family Planning Perspectives. 1972, 4, 3, 54-60.
- Gardner, A., and Reissman, F., Self help in the human services. California: Jossey Boss, 1977.
- Gelinas, D., Support development issues during life transitions: Bereavement of young adults. Presented at American Psychological Association Annual Meeting, 1975.
- Goldsmith, S., Gabrielson, M., Mathews, V., and Potts, L., Teenagers, sex and contraception. Family Planning Perspectives. 1972, 4, 1, 32-38.
- Gordon, S. The sexual adolescent. North Scituate, Mass.: Duxbury Press, 1973.
- Gottesfeld, H., The critical issue of community mental health. New York: Behavioral Press, 1974.
- Gottlieb, B. Lay influences on the utilization and provision of health services: A review. Canadian Psychological Review. 1976, 17, 2, 126-136.
- Gottlieb, B., The primary group as supportive milieu: Application to community psychology. Presented at American Psychological Association Annual Meeting, 1977.

REFERENCES (CONTINUED)

- Gottlieb, B., and Carveth, W.B., The role of primary group support in mediating stress: An empirical study of new mothers. Presented at the Canadian Psychological Association; Vancouver, BC, 1977.
- Gough, H., A factor analysis of contraceptive preferences. Journal of Psychology. 1973, 84, 199-210.
- Grover, J., and Tinkham, C., Abortion in teenagers: Positive intervention at a negative time. Psychiatric Opinion. 1975, 13-22.
- Heider, F., The psychology of interpersonal relations. New York: Wiley and Sons, 1958.
- Hill, R., Stycos, J.M., and Back, K., The family and population control. Chapel Hill: University of North Carolina Press, 1959.
- Hirsch, B., The social network as a natural support system. Presented at American Psychological Association Annual Meeting, 1977.
- Hovland, C., Janis, I., and Kelly, H., Communication and persuasion: Psychological studies of opinion change. New Haven: Yale University Press, 1953.
- Hovland, C., and Weiss, W., The influence of source credibility on communication and effectiveness. The Public Opinion Quarterly, 1951, 15, 635-650.
- Jaffe, F.S., and Cutright, P., Short-term benefits and cost of United States family planning programs, 1970-1975. Family Planning Perspectives. March/April 1977, 9, 2, 77-80.
- Jaffe, F. and Polgar, S., Family planning and public policy: Is the "culture of poverty" the new cop-out? Journal of Marriage and the Family. 1968, 30, 228-235.
- Jessor, S. and Jessor, R., Transition from non-virginity among youth: A social-psychological study over time. Development Psychology. 1975, 11, 4, 473-484.
- Kahn, R., Discussion: Symposium on support and coping. Presented at American Psychological Association, 1975.
- Kantner, J., and Zelnik, M., Sexual experience of young, unmarried women in the United States. Family Planning Perspectives. 1972, 4, 4, 9-18.
- Kantner, J., and Zelnik, M., Contraception and pregnancy: Experiences of young unmarried women in the United States. Family Planning Perspectives. 1973, 5, 1, 21-33.

REFERENCES (CONTINUED)

- Katz, E., The two step flow of communication: An up-to-date report on a hypothesis. Public Opinion Quarterly. 1957, 21, 61-78.
- Katz, E., The social itinerary of technical change: Two studies of the diffusion innovations. Human Organization. 1961, 20, 70-82.
- Katz, E., and Lazarsfeld, P., Personal influence: The part played by people in the flow of mass communication. New York: The Free Press, 1955.
- Katz, E., Levin, M., and Hamilton, H., Traditions of research on the diffusion of innovation. American Sociological Review. 1963, 28, 2, 237-252.
- Keller, A.B., Sims, J.H., Henry, W, and Crawford, T., Psychological sources of "resistance" to family planning. Merril-Palmer Quarterly. 1970, 16, 288-302.
- Keily, H., The two functions of reference groups. In G.E. Swanson, T.H. Newcomb, and E.L. Hartley, (Eds.). Readings in social psychology. New York: Holt, Rinehart and Winston, 1952.
- Kinch, R., and Drugger, E., Some sociomedical aspects of the adolescent pregnancy. International Journal of Obstetrics and Gynecology. 1970, 8, 480-486.
- Klapper, J., The effects of mass communication. Chicago: The Free Press, 1960.
- Kogan, N., and Wallach, M., Risk taking: A study in cognition and personality. New York: Holt, Rinehart and Winston, 1964.
- Lasswell, H., The structure and function of communication in society. In L. Bryson, (Ed.) Communication of ideas. New York: Harper, 1948, 37-51.
- Lazarsfeld, P., Berelson, B., and Gaudet, H., The people's choice. New York: Cobell Press, 1948.
- Leavy, R., and Lekisch, H., Support development groups in high school. Presented at American Psychological Association Annual Meeting, 1975.
- Lehfeldt, H., The psychology of contraceptive failures. Medical aspects of human sexuality. 1971, 5, 5, 68-73.

REFERENCES (CONTINUED)

- Lehfelt, H., and Guze, H., Psychological factors in contraceptive failure. Fertility and Sterility. 1966, 17, 110-116.
- Lewin, K., Field theory in social science. New York: Harper and Brothers, 1951.
- Lewis, R., Parents and peers: Socialization agents on the coital behavior of young adults. Journal of Sex Research, 1963, 9, 2, 156-170.
- Libby, R., Adolescent sexual attitudes and behavior. Journal of Clinical Child Psychology. Winter 1974, 36-42.
- Libby, R., and John, E., A theoretical framework for premarital sexual decision in the dyad. Archives of Sexual Behavior. 1973, 2, 4.
- Lindemann, C., Birth control and unmarried young women. New York: Springer Publisher, 1974.
- Luker, K., Taking chances: Abortion and the decision not to use contraception. Los Angeles: University of California Press, 1975.
- MacDonald, A., Jr., Internal-external locus of control and the practice of birth control. Psychological Reports. 1970, 21, 206+.
- Maddison, D., and Walker, W., Factors affecting the outcome of conjugal bereavement. British Journal of Psychiatry. 1967, 113, 1057-1067.
- Maloney, J., and Schonfeld, E., Social change and attitude change. In G. Zaltman, Process and phenomena of social change. New York: Wiley and Sons, 1973.
- McKinlay, J., Social networks, lay consultants and help seeking behavior. Social Forces, 1973, 51, 275-292.
- Mead, G., Mind, self and society. Chicago: University of Chicago Press, 1934.
- Merton, R., Patterns of influence: A study of interpersonal influence and common behavior in a local community. In P. Lazarsfeld and F. Staton, (Eds.). Communication research. New York: Harper and Row, 1948-1949.
- Metzer, R., and Golden, J., Psychological factors influencing female parents in the selection of contraceptive devices. Fertility and Sterility. 1967, 3, 6, 845-853.

REFERENCES (CONTINUED)

- Miller, W., The personal style inventory. Unpublished manuscript. Stanford: 1973.
- Miller, W., Personality dimensions relevant to unwanted pregnancy. Presented at American Psychological Association Annual Meeting, 1974.
- Miller, W., Psychological vulnerability to unwanted pregnancy. Family Planning Perspectives. 1973, 5, 199-201.
- Miller, W., Sexuality, contraception and pregnancy in a high school population. California Medical Journal. 1973, 119, 14-21.
- Miller, W., Sexual attitude questionnaire: Instrument for measuring two psychological dimensions of sexuality relevant to population growth. Unpublished manuscript: Stanford: Stanford University, 1973.
- Miller, W., A survey of psychological antecedents to contraception among abortion seekers. Unpublished manuscript. Stanford University, 1973.
- Miller, W., and Fisk, N., Sexual knowledge questionnaire. Unpublished manuscript. Stanford: Stanford University, 1972.
- Mindick, B., Oskamp, S., and Berger, D., Prediction of failure in contraceptive planning. Presented at American Psychological Association Annual Meeting, 1974.
- Misra, B., Correlates of male attitudes toward family planning. In D. Bogue (Ed.) Sociological contributions to family planning research. Chicago: Chicago University Press, 1966.
- Mitchell, J., The concept and use of social networks. In J. Mitchell (Ed.) Social networks in urban situations. New York: Humanities Press, 1969.
- Mitchell, J., Social networks. Annual Review of Anthropology. 1974, 3, 279-300.
- Murrell, S., Community psychology and social systems. New York: Behavioral Publications, 1974.
- Nadelson, C., The pregnant teenager: Problems of choices in a developmental framework. Psychiatric Opinion. 1974, 6-.2.
- Newcomb, T., Attitude development as a function of reference groups: The Bennington Study: In G. Swanson, T. Newcomb and E. Hartley, (Eds.). Readings in social psychology. New York: Holt, Rinehart and Winston, 1952.

REFERENCES (CONTINUED)

- Notman, M., Teenage pregnancy: The non-use of contraception. Psychiatric Opinion. 1975, 23-27.
- Oskamp, S., Mindick, B., Berger, D., and Motta, E., Predicting success and failure in contraceptive planning. Presented at American Psychological association Annual Meeting, 1974.
- Osofsky, J., and Osofsky, H.J., (Eds.) The abortion experience. Hagerstown, Maryland: Harper and Row, 1973.
- Pakter, J., Nelson, F., and Svirig, M., Legal abortions: A half decade experience. Family Planning Perspectives. 1975, 7, 6, 248-255.
- Palmore, J., Jr., The Chicago snowball: A study of the flow and diffusion of family planning information. In D. Bogue (Ed.). Sociological Contributions of family planning research. Chicago: Chicago University Press, 1967, 272-363.
- Pattison, E., Psychological system therapy. In R. Hirshkowitz and B. Levy (Eds.). The changing mental health scene. New York: Spectrum Publishers, Inc., 1976, 127-152.
- Pettigrew, T., Social evaluation theory: Convergences and applications. In D. Levine (Ed.). Nebraska symposium on motivation. Lincoln: University of Nebraska Press, 1967, 241-311.
- Placek, P., Direct mail and information diffusion: Family planning. Public Opinion Quarterly, Winter 1974, 548-561.
- Pohlman, E., The psychology of birth planning. Scherkman Publishing Co.: Cambridge, Mass., 1969.
- Rainwater, L., Some aspects of lower class sexual behavior. The Journal of Social Issues, 1966, 22, 96-108.
- Rainwater, L., And the poor get children. Chicago: Quadrangle Books, 1960.
- Reichelt, P., and Werley, H., Contraception abortions and venereal disease: Teenagers' knowledge and the effect of education. Family Planning Perspectives. 1975, 7, 2, 83-88.
- Reiss, I., The social context of premarital sexual permissiveness. New York: Holt, Rinehart and Winston, 1967.
- Riley, J., and Riley, M., A sociological approach to communications research. Public Opinion Quarterly. 1951, 15, 445-560.

REFERENCES (CONTINUED)

- Rogers, E., Communication strategies for family planning. New York: Free Press, 1973a.
- Rogers, E., Diffusion of innovations. New York: Free Press, 1973b.
- Rogers, E., and Shoemaker, F., Communication of innovations: A cross-cultural approach. New York: Free Press, 1971.
- Rovinsky, J., Abortion recidivism. Obstetrics and Gynecology. 1972, 39, 649-659.
- Ryan, B., and Gross, N., The diffusion of hybrid seed corn in two Iowa communities. Rural Sociology. 1950, 8, 15-24.
- Sarason, C., Carrol, C., Maton, K., Cohen, S., and Lorenz, E., Human services and resources networks. San Francisco: Jossey Bass, 1977.
- Sarason, S. The psychological sense of community. San Francisco: Jossey Bass, 1974.
- Schofield, M., The sexual behavior of young adults, Boston: Little, Brown and Company, 1973.
- Schramm, W., and Roberts, D. (Eds.), The process and effects of mass communications. (2nd edition). Chicago: University of Illinois Press, 1971.
- Schramm, W., Communication in family planning. Reports on Population/Family Planning. 1971, 7, 1-43.
- Seeley, O., Psychological correlates of the implementations of family planning goals: Personality and family planning behavior. Presented at World Population Society Conference. Washington, D.C., November, 1975.
- Sheriff, M., Social factors in perception. In G. Swanson, T. Newcomb, and E. Hartley, (Eds.). Readings in social psychology. New York: Holt, Rinehart and Winston, 1952.
- Shope, D., Interpersonal sexuality. Philadelphia: W.B. Saunders Co., 1975.
- Slagle, S., Arnold, C., and Glascock, E. Self competence: A measure of relative risk of unwanted pregnancy? Unpublished manuscript, 1975.
- Smith, M., Motivation, communications research, and family planning. In G. Zaltman, P. Kotler, and I. Kaufman, (Eds.). Creating social change. New York: Holt, Rinehart and Winston, Inc. 1972.

REFERENCES (CONTINUED)

- Sorenson, R., Adolescent sexuality in contemporary America: Personal values and sexual behavior, ages 13-19. New York: World Press, 1972.
- Stein, K., Sarbin, T. and Kulik, J., Future time perspective. Journal of Consulting and Clinical Psychology. 1968, 32, 257-264.
- Stouffer, S., Suchman, E., DeVinney, L, Star, S., and Williams, S., Jr., The American soldier: Studies in social psychology in World War II. (Vol. 1 and 2) Princeton: Princeton University Press, 1949.
- Stycos, J., Patterns of communication in a rural Greek village. Public Opinion Quarterly. 1952, 16, 59-70.
- Sweeney, W., Media communication in population/family planning: A review. Population Reports. 1977, Series J. 6, 289-319.
- Thornburg, H., A comparative study of sex information sources. Journal of School Health. 1972, 42, 88-91.
- Tolsdorf, C., Social networks, support and coping: An exploratory study. Family Process. 1976, 15, 4, 407-417.
- Tolsdorf, C. Social networks, support and psychopathology: Concepts and exploratory findings. Unpublished paper, 1976.
- Vener, A., and Stewart, C., Adolescent sexual behavior in middle America. Revised: 1970-1973. Journal of Marriages and the Family. 1974, 36, 728-735.
- Waler, D., Role, personal history and social support of informal helpers in a university setting. Presented at American Psychological Association Annual Meeting, 1975.
- Zaltman, G. (Ed.), Processes and phenomena of social change. New York: Wiley and Sons, 1973.
- Zaltman, G. and Duncan, R., Strategies for planned change. New York: Wiley and Sons, 1975.
- Zax, M. and Spector, G., An introduction to community psychology. New York: Wiley and Sons, 1974.
- Zelnik, M., and Kantner, J., Attitudes of American teenagers toward abortion. Family Planning Perspectives. 1975, 7, 2, 89-91.