

SOME RELATIONS BETWEEN SEXUAL
BEHAVIOR, ATTITUDES AND FANTASY

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By

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Abstract of Master's Thesis
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The present study was designed to explore the area of the relationship of fantasy to behavior with respect to the "primary drives" of sex and aggression. It was hypothesized that physical sex imagery in TAT stories would relate positively with overt sexual behavior and that inhibition imagery would relate negatively with overt behavior. It was further hypothesized that a positive relationship would exist between overt sexual behavior and aggressive fantasy. A supplementary hypothesis predicted a negative relationship between overt sexual behavior and the degree of belief that sexuality should be restricted to intimate relations, i.e., those involving love and marriage. The modulating effects of socioeconomic status on these hypotheses was also explored.

Measures of sexual fantasy were obtained using the standard experimental (written) version of the TAT, with suitable pictures for the fantasies being examined. Subjects were 145 high school juniors and seniors, 71 males and 74 females. The stories were coded for a variety of primary drive categories (sex, aggression, orality) as well as imagery related to guilt and inhibition. Questionnaire and interview measures of sexual behavior were also obtained from the subjects during another testing session.

Statistical analysis revealed a high degree of interrelationship

among fantasy variables. Primary drive impulse themes were positively related to inhibition themes for both boys and girls. These findings suggest that expressive and restraining imagery occur together in normal populations. The boy's data showed distinct clustering with physical sex and non-physical sex imagery tending to appear in separate clusters.

For both boys and girls, the behavioral variables (dating, necking, petting, flirting, etc.) were also highly interrelated. Positive relations existed among all behavioral variables with the exception of Degree of Belief and Intercourse. Degree of Belief negatively correlated with all variables for boys and girls. Due to the low frequency of occurrence of intercourse in the female sample, this variable was correlated only with the frequency of petting. Among males, due to a higher frequency of occurrence, intercourse correlated with a wider range of variables.

Analyses failed to reveal any relationships between fantasy and behavioral measures. For male data, the number of correlations significant at the 5 percent level fell below chance expectations. For female data, the chance level was exceeded by only a small amount. Thus for females, interpretations were considered highly speculative. The results were attributed to (1) a low frequency of intense sexual behavior in the present population and (2) differing conceptual levels of fantasy and behavioral variables. One conclusion was that previous research findings of positive relationships between fantasy and behavior would have been replicated, had the present study involved a measure of frequency of orgasm, instead of interpersonal measures (e.g. intercourse, petting).

The hypothesized negative relationship between overt sexual behavior and degree of belief that sexuality should be restricted to intimate relationships was confirmed. Significant negative correlations were obtained between

attitude and the overt behavioral variables for both boys and girls. Explanations for this finding involved a dissonance reduction model and alternatively, a consideration of the effect of attitudes on sexual behavior.

Socio-economic status was positively related to the occurrence of aggressive fantasy among males and negatively to the occurrence of sexual intercourse. Factoring out social status did not alter the zero-order relationship between fantasy and behavior. Among girls, virtually no relationships occurred between social status and fantasy or behavioral variables.

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**SOME RELATIONS BETWEEN SEXUAL
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INTRODUCTION

One result of the controversy over the phenomenological vs. behavioral approach to research is a compromise: psychology is the study of both behavior and experience, of manifested activity and "private states" (Wann, 1964). Many questions have been raised as to the relationship between the two and the possibilities of predicting one from the other. It is to one facet of this general problem that this work is directed, namely the role of fantasy in the modulation and expression of the "primary drives" of sex and aggression.

Most investigations into "primary drive" expression have involved projective devices. Most notable is the Thematic Apperception Test (TAT) (Murray, 1943) and variations on it.

In an attempt to clarify and integrate discrepant findings in the area of the "generalized relationship between need states and apperceptive fantasy" Lazarus (1961, 1966) concluded that the principle of direct expressions of drives in fantasy was "incomplete." He suggests that a "substitutive-defensive" principle should also be invoked wherein fantasy "may serve as a substitute expression of needs." The "substitutive" principle states that for conditions of (1) low or moderate drive levels and (2) lack of "motoric discharge" a positive relation exists between needs and apperceptive fantasy. In this case, fantasy is "wishfulfilling" or "daydream." The "direct expression" principle serves when problem-solving behavior is involved: fantasy is a symbolic "working out" of

the ways to gratify needs. The "defensive" principle applies under conditions of "excessively high" levels of drive with subsequent anxiety, i.e., conditions of experimentally induced drives. According to Lazarus, the actual nature of the relationship depends on a wide variety of circumstances."

To investigate the extent to which drive inhibition is manifested in the TAT, Clark (1952) chose the potentially anxiety-laden motive of sexuality. In an exploratory study he performed three separate experiments. In experiment A, Ss were exposed to slides of nude females and immediately thereafter administered the TAT. The eight TAT cards used were, with one exception, from the Murray series. In experiment A only the first five cards were used. In Experiment (B) and (C), Ss were administered the first six and all eight respectively. A control group in Experiment (A) saw slides of landscapes and architecture. The slides of nudes constituted the experimental sex arousal.

In Experiment B an attractive female E constituted the experimental stimulus. To help insure effectiveness the E "staged" difficulty with the slide projector and wore an "allegedly" provocative perfume. A male E tested the control group where no nude or neutral slides were utilized.

Experiment (C) was essentially a replication of (A) in a liberal beer-party setting. Ss were permitted to drink throughout. Slides of nudes were shown to the experimental group. A control group was not exposed to slides of any kind.

TAT protocols were rated for Manifest Sex Content (MSC) which Clark categorized on a continuum from one to three. A score of (1) was assigned to "primary sex": "explicit or implicit evidence of sexual intercourse;

a score of (2) to "secondary sex": evidence of "kissing, dancing, fondling." A score of (3) was assigned to "tertiary sex": characterizations of people in the stories being "lovers" or "sweethearts." In addition, "three general categories (were scored) as being indicative of the presence of guilt: "A score of one was assigned when someone was guilty, ashamed or embarrassed; a score of (2) was assigned to expressions of external punishment, criticism or ostracism for sexual activity. A score of (3) was assigned to evidence of self-punishment "in some concrete fashion" as a result of sexual activity. Both sex and guilt were scored only once for each story.

The findings were (1) MSC was lowered following the presentation of sexually arousing stimuli (provocative female E and nude slides). (2) The experimentally aroused group of Experiment (C) showed "more" sex imagery than the control group. (3) "in general" the groups in the alcoholic conditions show more sex imagery than did the non-alcoholic groups of (A) and (B). With respect to the three types of sex imagery, the general finding was that primary sex was the main distinguisher between groups. The control group of Experiment C (non-aroused, alcoholic setting) exhibited a significantly greater amount of primary sex imagery than did the control group of Experiment A (non-aroused, "dry" setting). There was no significant difference in sex imagery (over all) between the non-aroused groups of Experiment A and C. More guilt was evoked by the expression of primary sexuality than by the expression of less direct sex activity. Guilt connected with "secondary and tertiary" sex activities did not show any difference.

Clark makes a distinction between stimulus (arousal) produced guilt and response produced guilt, i.e., guilt produced by writing stories of a sexual nature. Using an approach-avoidance model, he suggests that for stimulus produced motives, the avoidance or guilt gradient is steeper than the approach or sex gradient. He suggests that for aroused groups in (A) and (B) the "stimulus produced guilt is at a higher level than the stimulus produced sex. Thus control groups would have "a greater tendency to express sex" and also to express primary sex. Having done this the control groups could be seen as expressing a greater amount of response produced guilt.

In further consideration of the relation of inhibiting factors to the expression of sexuality, Clark and Sensibar (1955) rescored the TAT protocols from the earlier study for the presence of symbolism. This was based on the Freudian hypothesis that symbolic behavior is a disguised form of sexual expression. It occurs (with respect to primary drives) as a function of harsh or repressive social values. This is one test of the dynamic hypothesis underlying the Freudian theory.

Stories were assigned weights of two, one and zero: two when "strong symbolism" was present; one when "some symbolism" was present and zero when there was no evidence of symbolism.

According to the investigators' hypothesis, symbolic sex content (SSC) should be greater where MSC is lower provided that there is sexual arousal. Their results indicated that symbolism was indeed a "substitute" outlet for sexual expression. However, they discovered a curvilinear relationship between MSC and SSC. The paradox resulting was the presence of high MSC and high SSC occurring simultaneously.

This "paradox" was explained as being a function of "response produced guilt." Writing stories involving primary sexual activity may cue off enough guilt to bring about anxiety with resultant symbolism. According to the investigators, this did appear to be happening since "...in some cases...a primary sex story was followed immediately by one containing symbolism."

With respect to the strength of symbolism, the "aroused" groups exhibited significantly higher symbolic sex than did the control groups. When data were analyzed for the permissive and non-alcohol settings, the latter showed less SSC than did the former.

Tentatively, Clark and Sensibar conclude (1) that classical symbolism does serve as a disguised form of sexuality; (2) symbolism is preferred only insofar as there is guilt-related anxiety present; (3) the amount of symbolism present in a story is not necessarily a direct index of the "normal" level of anxiety and (4) the presence of response-produced guilt may explain why high MSC and high SSC could appear simultaneously.

Some problems are suggested in terms of the Clark and Sensibar study. The scoring, at least as reported, is rather vague; little explanation is given as to what "some" and "strong" mean in terms of symbolic content. It would have been more fruitful for later researchers had these categories been made more specific. For example, in scoring for MSC, primary sexuality received priority over other levels of sexuality in the same story, rather than being coded independently. Likewise, it was not clear whether the investigators gave priority to "strong symbolism" vis a vis other levels of SSC in the same story.

Following along the lines of the above studies, Mussen and Scodel (1955) "essentially" replicated Clark's procedure using two conditions. The experimental groups were shown slides of nude females by an authoritarian figure: "a stern professorial man in his sixties." The control group watched the slides in the presence of a permissive young graduate student. Following presentation of slides, the groups were administered TAT cards and asked to write stories.

The manifest and "implied" sex content of each story was rated on a seven point scale, from zero to six "depending on the intensity of the sexual experience. The total sex response was the sum of scores on eight stories. The mean response for the informal group, in terms of MSC was higher than that of the authoritarian group. There was also greater variance in the informal group.

Mussen and Scodel concluded that the presence of an authority figure may inhibit the expression of socially disapproved needs. In accordance with the Freudian hypothesis, the inhibition is the result of internalized "punitive" associations with the older man.

A study by Kalin (1964) deals in part with the effect of "situation" on the expression of sensuality. Although the study was designed primarily to measure the effects of alcohol consumption on the expression of physical needs, some of the results are relevant in the present context. Posited by Kalin is the independence of sentience and inhibition. The former he defines as a "state" of sensuous, bodily physicality." The latter is defined as the "process" which interferes with the expression of sentience "and other impulses" and which "...guide(s) adaptive, goal directed behavior."

Utilizing two fraternities from a large Eastern university, Kalin manipulated sentence by exposing one group of males to "a sexy female folksinger." Another group was exposed to "neutral recorded music." Inhibition was manipulated in two ways. One group was tested in the classroom situation and another tested in a private bachelor apartment. An adapted version of the TAT (photos) was administered to the groups. The stories were coded for thematic sex material and expressions of sex restraints including reflections of guilt.

Contrary to the E's original purpose, the expression of both physical and non-physical sex in TAT stories was decrease in the presence of the folksinger. However, the decrease was not statistically significant. Ss exposed to the folksinger exhibited fewer sex thought, particularly with respect to "consumation imagery" (i.e., references which do not involve sexual deprivation). The number of restraining fantasies were increased in the group exposed to neutral recorded music showed greater MSC and lower restraints. The folksinger raised the frequency of "personal negative aftermath" (guilt) and it was found that for persons high in sexual imagery, the "avoidance imagery" was raised. The presence of "physical sex thoughts" was positively related to the occurrence of "personal negative aftermath." For the dry groups alone, the "situation had no discernible effect." Over all, however, the results demonstrated the effects of the inhibiting atmosphere (classroom) as compared to the permissive atmosphere of a private bachelor apartment. In the former setting, sentient thoughts, including "physical sex thoughts" decreased. Increased in this setting were themes of avoidance in Ss high in sexual imagery. There were also, in the inhibiting

setting, an increase of inhibition fantasies in the form of sex restraints and "time concern." Thus one hypothesis was supported: sex is expressed or suppressed to the extent that the situation is appropriate. The "inappropriate" situation serves to inhibit the expression of sexuality. "Inhibition creates inhibition fantasies" and is, to Kalin, an "active process."

These findings lend indirect support to the Clark study (1952) where an "alluring" female E was coupled with a decrease in MSC.

The above studies all deal with experimentally aroused n Sex. That is, there is an "acute heightening" of socially prohibited needs. Rather than defenses being circumvented, they seem also to be heightened, particularly in people who experience the need more acutely. It would simplify things too much to conclude from these studies that "the more people think, the less they do." What seems rather to be the case is "the more intensely people are stimulated, to the level which these studies attempt to reach, the more actively do they defend against the expression of drives, at least temporarily.

Noteable is the inconsistency of the situations in which Thematic Sex is inhibited. By these studies, a "stern professorial man in his sixties" has an effect in the same general direction on the projection of n Sex as does a provocative female experimenter or a "sexy folksinger." The possible mechanisms involved are interesting. It is doubtful that n Sex is inhibited in these situations for the same reason. It can be suggested that the presence of a female who is provocative but "unavailable" creates a "look - don't touch" situation which might be seen as stimulating anger responses which in turn inhibit the expression of sexual

responses. The "punitive associations" with the older man and the subsequent inhibition of MSC would appear to be the most plausible explanation for a decrease in MSC in that situation. In short while the occurrence of a decrease in MSC is demonstrated in varying situations, it is not appropriate to conclude that the dynamics are automatically the same.

With respect to the setting or situation not being appropriate to the expression of sex (Kalin, 1964), there is some inconsistency. Clark (1952) and Mussen and Scodel (1955) both derived measureable MSC in a classroom situation - enough to demonstrate a difference between two groups. Thus, the effects of the inhibiting setting depends on the level of inhibition one wishes to talk about. The effects of the "setting" or "situation" in which fantasy data are collected are clearly relevant in determining the type of fantasy a subject has. However, the parameters of these effects need to be tied down further.

In another type of study, Epstein and Smith (1957) attempted to determine whether projective responses could distinguish between differing degrees of sexuality. Their question concerned the possibly different functions of "drive aroused by external stimulation" and drive "aroused by internal stimulation." They were interested in drive which was not artificially produced i.e., produced by presentation of sexually stimulating materials such as nude slides or provocative female Es. According to Epstein and Smith, the transient states induced in the Clark (1952) and Kalin (1963, 1964) studies are of less importance to the user of projective tests than are the relatively (stable) and enduring states which occur naturally as a function of hormonal balance.

These investigators used two indices to measure sex "drive:"

(1) a self-report of orgasms per weekly period and (2) "time since last orgasm relative to rate." A third index was a self-report of the current level of the S's internal stimulation. This proved to be of no value.

The investigators used 59 male college students. Two different orders of test material presentation were used with half the students in each order. In one sequence a group Rorschach was administered followed by eight pictures for which projective stories were elicited. The pictures were derived from the Murray Series (1943), the Symonds Picture Story test and selected magazines. According to Epstein and Smith, "...none of the pictures was high in stimulus relevance." Four minutes were given for writing stories. Following writing, a questionnaire on sexual behavior was administered. This was used to elicit information concerning rate of orgasm and relative deprivation. Following administration of the questionnaire, the Ss were shown "slides of sexually attractive women." They then rated each slide for "sex appeal."

In the other sequence, the order of presentation of group Rorschach and TAT was reversed. In other respects the sessions were identical. The questionnaire on sex behavior was presented prior to the slides of sexually attractive females to control for "temporary drive states."

Two weighted scores were investigated: (a) Murray Need Sex (1943) was rated using scores of (1) for any reference to sex, (2) for reference to secondary sexual activity and (3) for reference to primary sex. (b) "Appealingness of sex object" was rated on a continuum from -3 to +3.

A -3 was assigned to a story in which the female character was unappealing to the hero despite the expression of need sex. A +3 was assigned when the sex partner was unusually appealing.

Rate and deprivation were divided into six categories: one orgasm per week/less than four days ago: more than four days ago; two orgasms per week/less than three days ago: more than three days ago; three or more orgasms per week/less than two days ago: more than two days ago.

The investigators found that n sex, appealingness of sex object and rating women in pictures were all positively related to rate of orgasm. These results are contrary to the studies done by Clark (1952) and Kalin (1964) where an inverse relation was found between drives and their expression. The Rorschach findings proved ambiguous and will not be considered in the present discussion. No relationship was found when deprivation was used as a measure of drive.

The authors are "cautious" in their interpretation of the results. They suggest that they have simply "...demonstrated a relationship between projective responses and an external criterion." The issue of criterion variables is an important one. According to the authors, the "most obvious difference" between their study and that by Clark (1952) is "the manner in which drive was determined". One was determined using nude slides and the other was determined using measure of sexual expression, i.e., orgasms per week.

In further exploring the areas of sexual expression and conflict, Leiman and Epstein (1961) replicated the findings in the above study with the addition of a guilt questionnaire. Their research questions

grew out of a number of problems in the earlier studies. In the Epstein and Smith study (1957), MSC was related to rate of orgasm but not to deprivation. An additional problem concerned the relation of drive to stimulus relevance. The experimenters wished to test an extension of Miller's model of displacement (1948, 1951) with respect to projective techniques. According to this model high drive-relevant cues favor inhibition, while low drive relevant cues favor expression.

The investigators used a sample of unmarried male psychology students. These Ss were given a specially constructed thematic test; eight pictures were utilized; three of them from the Murray series (1943). Following the TAT a questionnaire was administered, designed to elicit information concerning sex drive and guilt over sex. A checklist was used to determine rate and deprivation. Rate was measured on a continuum from one orgasm or less per week to eight or more per week. Deprivation was measured by the time which had elapsed since the last occurrence of orgasm: one day ago or less; more than two days ago.

The investigators obtained two thematic scores: Need sex and Sex guilt. The former was derived from stories by assigning weights of (1) to a "slight" reference to sex, (3) to a reference to sex contact and (5) to actual or implied intercourse. The scoring for sex guilt was similar: a score of (1) was assigned to a direct admission of guilt by the hero; a score of (3) to the occurrence of external punishment and a score of (5) to accidental misfortune occurring after sexual activity.

Two analyses of variance were performed to investigate the influence of (1) Drive (2) stimulus relevance (3) guilt independently and in interaction with each other.

Their results lent support to those found by Epstein and Smith (1957). An inverse relation was demonstrated between guilt and thematic sex, (MSC). When guilt was high, thematic sex was low. An inverse relation between guilt and rate was also shown which might be seen as indirectly supporting the earlier study by Clark where (inferred) guilt was related to the expression of MSC. MSC and rate were positively related, replicating the findings of the Epstein and Smith study. Deprivation proved to be a more complex issue. Only when findings concerning guilt were taken into account was MSC related to Deprivation. When the amount of reported guilt was low, there was a direct relation between deprivation and MSC. When the amount of guilt was increased, an inverse relation was demonstrated. In the context of guilt, MSC will be high when there is lesser amount of deprivation. Likewise, in this same context, MSC will be low when deprivation is greater.

Some of the major issues in the above studies can now be summarized. It has been suggested that there is a discrepancy between the findings of the Epstein and Smith (1957) and Leiman and Epstein (1961) studies and those of Clark (1952), Clark and Sensibar (1955) and Kalin (1964). In the former, a direct relationship was demonstrated between reported drive and its expression on the TAT. In the latter, an inverse relation was demonstrated in the same general area.

However, there may be some questions as to whether these findings are in fact contradictory. The manner in which drive was determined (defined) was indeed different in the two types of studies and the point is raised whether comparable results should thus be expected. It may be, in light of Lazarus' (1961, 1966) "substitutive-defensive"

principle that the discrepant findings are complementary.

It appears that when drive is experimentally induced there is an inverse relation between drive and its expression on the TAT. Inhibition of fantasy might be seen as reflecting the reaction to a more or less "acute" stress. The defenses might be maximized when the S is presented with a "moral choice" situation. The "defensive" principle would be appropriate in this case. Here, an inverse relationship could be predicted, particularly when the situation is inappropriate to drive expression.

In studies which measure drive by some external and not-presently-salient criterion (number of orgasms over time) and in which the TAT is administered under neutral conditions, the relationship is direct. Such a stress situation as mentioned above is not implied and the S is reporting what has already happened. If he experiences guilt over the behavior in question he might rationalize a sudden resolution to perform the behavior again; "that is water under the bridge..." The direct-expression hypothesis seems appropriate here.

In the present study the TAT is administered under as neutral conditions as possible. If it could be assumed that, under these conditions, the subjects were daydreaming or fulfilling wishes, then Lazarus' "substitutive" principle would apply. A more adequate hypothesis would suggest that the teenagers are likely to project actual concerns over real-life issues and attempts at resolving them. This would reflect the direct-expression principle.

The purpose of the present study is to explore these issues further. The problem remains to determine the relationship of specific classes of fantasy to one specific class of behavior. In order to test some of these

issues, the following hypotheses will be offered:

1 (A). As an individual difference effect, a positive relationship exists between overt sexual behavior and the occurrence of "physical sex imagery" in TAT stories. This is based on the conclusion of Leiman and Epstein (1961) that a positive relation exists between reported sexual activity and MSC.

1 (B). A negative relation exists between overt sexual behavior (OSB) and "non-physical sex imagery" as expressed in TAT stories. The assumption underlying this is that a higher level of overt sexual behavior is reflective of more direct fantasy expression.

2. A negative relation exists between OSB and sex-inhibition fantasy occurring in TAT stories. This is an extension of the above. If supported this would lend support to the general conclusion that a lower anxiety level over sexual matters is associated with a higher amount of overt behavior.

3 (A). A positive relation exists between OSB and the expression of aggressive fantasy. This is based on the findings of Clark (1952), Clark and Sensibar (1955) and Barclay and Harber (1965) where a "strong linkage" was observed between the expression of sexual and aggressive fantasy.

3 (B). A negative relation exists between aggression inhibition fantasy (Kalin, 1964) and OSB. This is an extension of the above.

In addition to the above hypotheses, the following relations will be explored:

4. A positive relation exists between level of flirting skill as determined in the interview setting and OSB.

5. A negative relation exists between OSB and the degree of belief that sexuality should be restricted to intimate relations, i.e., those involving love and marriage.

The above studies have left a gap in their failure to explore the possible effects of the experimental variables with females. The present study will attempt to deal with this in an exploratory way.

The following findings are given in the Kinsey et al. (1953) work in relation to fantasy over the opposite sex. A smaller percentage of females "ever had" erotic stimulation through thinking or fantasizing

about the opposite sex. Females receive less vicarious stimulation than males (through peer interaction, etc.) and tend to find a more narrow range of stimuli in fact, "stimulating." As opposed to 89% of males who fantasized during masturbation, only 72% of females did so. Of those who fantasized "almost always" during masturbation, males did so in 72% of the sample while 50% of the females did so. However, a smaller percentage of females than males "never fantasized" during masturbation.

There is indication that females are less exhibitionistic than males as a smaller number of females marked or wrote "graffiti" in any situation. Females proved less inclined than males to discuss sex or to find such discussion stimulating. Females were less aroused by the prospect of promiscuity than were males and most resistant to purely "psychologic" stimulation. For females vis a vis males, the social significance of coitus played a greater role than the physiologic significance.

In terms of guilt, of those unmarried girls having intercourse, a large percentage did not regret the experience. There was a tendency toward less regret (guilt) in females who had had more coital experience than among those who had "stopped short" after limited experience. Among females, however, moral factors serve as a greater restraint on overt sexual behavior (than for example, concern over the prospect of pregnancy). Regret connected with the extent of pre-marital activity was (statistically) independent of the generation to which the female belonged. Sexual activity for the female was often "discontinuous" and thus it was more difficult for females than males to give an index of "rate" of activity.

With respect to the relationship between sex and aggression, studies by Sanford (1943) and Symonds (1949) indicate an increase in aggressive fantasy for both males and females in adolescence. With respect to sex the relation is not as clear. In analyzing projective protocols, Sanford found an increase in sexual fantasy for adolescent males but a decrease in sexual fantasy for adolescent females. In addition, among adolescent males, themes of sexuality in projective protocols were inversely related to themes of "abasement" (punishment). With girls, however, while themes of sex showed a decline, themes of abasement were increased. Symonds noted a general decline in erotic fantasy though his study does not distinguish between males and females (Douvan, 1966).

In light of these findings, the hypotheses can be further elaborated in terms of sex differences. Hypothesis (1) indicating a positive relation between OSB and physical sex in the TAT protocol will be expected to hold for both males and females. The relationship should be somewhat lower among females since according to the Kinsey data, females show less fantasy than males irrespective of sexual activity. Hypothesis (1B) will likewise be expected to hold for both males and females though a lower order relationship will exist among females. This is based on (1A). Hypothesis (2), predicting a negative relation between OSB and sex inhibition fantasy in TAT protocols, will be expected to hold for both males and females though the relationship will be lower for females. Presumably, if females show less fantasy to begin with, there will be less inhibition. Hypothesis (3) predicts a positive relationship between sexual and aggressive fantasy and will be expected to hold for males and females, in accordance with findings of Sanford (1943) and Symonds (1949).

Based on the above, hypothesis (3B) will be expected to hold for both males and females.

In accordance with Kagan and Moss (1962), heterosexual activity among females depends a great deal on opportunity and the ability to attract a male and that this skill may be cultivated by adult sex-role models without the expectation that attraction will lead to overt sex behavior. Therefore, hypothesis (4A) will be expected to hold only for males with a zero order relationship existing for females. Because hypothesis (5) deals presumably with "moral training," it may be expected to hold for both males and females with a somewhat lower relationship for males than females.

METHOD AND PROCEDURES

SELECTION OF SUBJECTS Subjects for the present study are a sample of adolescent juniors and seniors in high school originally involved in a study of adolescent leisure-time activities (Zucker, 1968). These adolescents were from a community of slightly under fifteen-thousand people in one of the mid-Atlantic states. This community was selected because of its relative stability in terms of population and economic distribution and its wide range of ethnic and religious groupings.

Under the general description of a study of teen-age life, a short questionnaire, including material on Ss' demographic characteristics and their alcohol consumption habits, was administered to the entire population of the town high school (N=1509). From this group, and working within a sub-population of Juniors and Seniors living within the towns limits, Ss were categorized within sex in terms of their drinking behavior, age, social class, high school course of study and anticipated future education.

From this pool, three groups (Heavy, Moderate and Non-drinking Ss) were selected that were matched on the remaining background variables. These individuals were then contacted at home and asked to take part in other work, also related to teenagers' leisure time activities, outside the school setting. This later work involved (a) participation in questionnaire sessions during which the TAT data was collected, (b) the keeping of personal diaries over a four-week period and finally (c)

participation in a 3-4 hour, tape-recorded, semi-structured interview at the end of the diary-keeping period. Refusals were made up with replacement subjects drawn from the original subject pool. The acceptance rate was 84%. 71 boys and 75 girls constitute the present sample. Given the association between drinking and sexual behavior (Zucker and Filmore, 1968), there is good reason to believe that a larger number of Ss with some heterosexual experience of intercourse are contained in the present sample than would have been had the Ss been chosen completely at random. However, as may be seen from Table 1, in terms of demographic characteristics, the total sample approximates very well the population from which it was drawn.

Measures and Coding Procedures

FANTASY DATA The self-administered TAT was administered during the group questionnaire session. All Ss received four pictures administered in counter-balanced order. Since approximately 72 Ss were involved in both boys and girls data collection (i.e., 3 replications of the possible combinations), order effects should be virtually eliminated. Similar sets of pictures, with sex-appropriate characters were presented to both boys and girls. A brief description of the pictures follow:

- (1) Same-sexed swimmer emerging from swimming pool (Boys & Girls)
- (2) Mad scientist looking at test tube (Boys)
- (3) Hoodlum in leather jacket leaning against lamp post; young college couple walking by; young man turned toward the hood (Boys)
- (4) Boatman rowing on a lake on a moonlit night (Girls)

TABLE 1

Demographic Characteristics of
Study Sample and Subject Pool

	Sample		Pool	
	M	SD	M	SD
<u>Males</u>	(N=71)		(N=177)	
Age	16.94	0.80	16.86	0.85
SES ^a	3.55	1.12	3.45	1.19
% in College Prep Curriculum ^b	66	—	50	—
<u>Females</u>	(N=74)		(N=217)	
Age	16.59	0.66	16.58	0.72
SES ^a	3.42	1.26	3.54	1.14
% in College Prep Curriculum ^b	49	—	58	—

^aHollingshead's (1957) two-factor index of social position: 1=highest status; 5=lowest status.

^bCurriculum choices were college preparatory, commercial and general programs.

(5) TAT Card 9GF: "A young woman with a magazine and a purse in her hand looks from behind a tree at another young woman in a party dress running along a beach" (Girls)

(6) Young couple walking along the sidewalk (Boys & Girls)

Pictures 1, 2, 3, 4, and 6 were used in the Kalin study (1964) from which the present fantasy coding has been adopted. All pictures were given in groups following the usual experimental TAT instructions. Subjects were given four minutes to write each story. (A copy of the actual pictures and instructions used may be found in Appendix A.)

The following are descriptions of the variables relevant to the present study. Heavy reliance is made on Kalin's original presentation of the coding scheme. (Kalin, 1966, pp 48 ff) The complete coding scheme is given in Appendix B.

The coding scheme contains two major classes of coding categories, one containing sentient thoughts and the other containing restraining thoughts.

SEX This is defined as any reference to sex, love or romance, and was further broken down into two sub-classes: "Physical Sex" and "Non-Physical Sex." The first class contains physical or body images, e.g., "...beautiful knees...", or "...he wants to sleep with her..." The second class includes all references not classed as physical; e.g., "...he asks her for a date...", or "...they are in love..." Thematic sex (of either physical or non-physical types) was also subdivided into Deprivation and Consumation imagery. Deprivation was defined as the state of wanting something sexual or romantic, also as mention of deprivation or frustration, e.g., "...he desires her body." Consumation

statements are those not clearly involving Deprivation.

AGGRESSION This variable was defined as "...any reference to human aggressive thought, emotion or action." (Kalin, 1966, p. 50) The category was also divided into the sub-classes of physical and non-physical aggression. An example of the former would be: "He slapped him..." Examples of non-physical aggression would include: "...he is angry.," or "He insulted him..."

SEX RESTRAINTS This class was composed of seven categories. (1) Personal Blocks are defined as intra-personal inhibition or anxiety "relevant to sex or romance." (2) Interpersonal Blocks are references to forces outside the individual acting in such a way so as to impede or prevent sexual or romantic behavior. Personal Negative Aftermath refers to guilt, regret, etc., following sexual or romantic activity. Impersonal Negative Aftermath includes references to mishaps or punishments subsequent to sexual behavior. Avoidance refers to refusal or escape relevant to a romantic encounter. Negative Associations to Sex refers to statements of "discontent, disillusionment or cynicism relative to sex."

RESTRAINING THOUGHTS Two sub-categories of more general restraining thought are used in the present study. Fear, as a category, includes all references to anxiety of any sort, where references are not subsumed under the above categories; eg., "...she screamed..." Time Concern was defined as references to waiting, having enough time, time running out, etc.

AGGRESSION RESTRAINTS This is defined as anything that involves

an avoidance reaction to aggression, such as "leaving the field," consciously restraining an aggressive impulse, etc.

CODING PROCEDURES:

Two coders, working independently and without knowledge of the subject's personal characteristics, were involved in coding the four TAT stories elicited from each S. In establishing coding reliability, stories were taken from the beginning, middle and end periods of coding. A measure of intra-rater reliability was also performed by doing a first and second coding on a sample of stories done by one of the coders. Reliability was computed in the following manner:

$$2X \quad \frac{\text{NUMBER OF AGREEMENTS}}{\text{TOTAL NUMBER SCORED BY BOTH CODERS}}$$

Reliabilities were calculated for both presence of a category and presence and absence. The results are presented in Tables 2, 3 and 4. These figures show appropriate levels of reliability for the purposes needed here. On this basis, in the final coding of TAT data, scores were summed across both coders to produce a total score which was then used in subsequent analyses.

MEASURES OF OVERT SEXUAL BEHAVIOR

These measures were obtained during the interview, at the end of the data collection process. The interview was semi-structured and took from 2½ to 4 hours to administer. It contained a standard series of questions and a standard series of directive and non-directive probes (See Zucker & Fillmore, 1968). Approximately half the interview schedule was derived from the Bandura and Walters Parent and Child Study of Adolescent Aggression (Bandura and Walters, 1959).

TABLE 2

**Intra-rater Reliability: Percent Agreement on Presence
and Presence Plus Absence of Categories Based on
First and Second Coding of Twenty Stories**

Category^a	Percent agreement on presence	Percent agreement on presence plus absence
Physical Sex Consummation	94	98
Non-Physical Sex Consummation	81	85
Physical Sex Deprivation	89	98
Non-Physical Sex Deprivation	100	100
Personal Block	86	98
Interpersonal Block	89	98
Avoidance	100	100
Personal Negative Aftermath	100	100
Impersonal Negative Aftermath	100	100
Negative Association to Sex	40	92
Physical Aggression	100	100
Non-Physical Aggression	89	98
Aggression Restraint	100	100
Time Concern	100	100
Fear	100	100
Ingestion Solid	— ^a	100
Ingestion Liquid	100	100
Oral Need	— ^a	100
Oral Negative Aftermath	100	100

^aBlank space indicates no observations on which to base reliability

TABLE 3

Intra-rater Reliability: Percent Agreement on Presence
and Presence plus Absence of Categories Based on
Story Samples from Beginning (B), Middle (M)
and End (E) of Coding

Category	Percent Agreement- Presence			Percent Agreement Presence plus Absence		
	B	M	E	B	M	E
Physical Sex Consummation	92	91	86	98	99	97
Non-Physical Sex Consummation	88	86	83	95	90	90
Physical Sex Deprivation	100	100	100	100	100	100
Non-Physical Sex Deprivation	50	89	89	95	99	98
Personal Block	0	86	0	96	99	98
Interpersonal Block	80	78	90	99	98	99
Avoidance	80	89	90	99	99	97
Personal Negative Aftermath	0	--	--	99	100	100
Impersonal Negative Aftermath	--	--	0	100	100	98
Negative Associations to Sex	--	57	50	100	96	98
Physical Aggression	96	80		99	96	100
Non-Physical Aggression	95	90	90	97	98	97
Aggression Restraint	82	86	0	92	99	99
Time Concern	57	78	50	95	95	85
Fear	100	100	80	100	100	99
Ingestion Solid	67	0	--	99	99	100
Ingestion Liquid	100	--	--	100	100	100
Oral Need		100	100	100	100	100
Oral Negative Aftermath	0	--	--	99	--	--

Note.--Blank space indicates no observations on which to base reliability.

TABLE 4

Inter-rater Reliability: Percent Agreement on Presence
and Presence Plus Absence of Categories
Based on 108 Stories

Category	Percent Agreement- Presence	Percent Agreement- Presence Plus Absence
Physical Sex Consummation	89	98
Non-Physical Sex Consummation	87	91
Physical Sex Deprivation	100	100
Non-Physical Sex Deprivation	80	97
Personal Block	50	98
Interpersonal Block	83	99
Avoidance	88	98
Personal Negative Aftermath	0	100
Impersonal Negative Aftermath	0	99
Negative Associations to Sex	55	98
Physical Aggression	90	98
Non-Physical Aggression	92	97
Aggression Restraint	80	96
Time Concern	61	92
Fear	95	100
Ingestion Solid	50	99
Ingestion Liquid	100	100
Oral Need	100	100
Oral Negative Aftermath	—	—

Note.--Blank space indicates no observations on which to base reliability.

Prior to the actual subject contact, interviewers were given a twenty-hour period of training. In addition, continual quality control checks were taken throughout the time interviewing was being done to protect against interviewer drift and deviations from standard technique. At approximately mid-point in the interview, when rapport had been established, a self-administered checklist was completed. This list was designed to tap subject involvement in impulsive or anti-social activities.

The variables that concern us here are the items "necking," "petting" and intercourse ("going all the way"). For each of these items, subjects indicated the number of times they had done each of the activities "when drinking" and "when not drinking" during the past year. These item frequencies were combined across drinking and non-drinking situations to yield a score reflecting the total number of times the subject had engaged in the activity in the previous year.

Following the completion of the questionnaire, the interview was resumed. Questions concerned with the subjects sexual behavior were introduced. The complete list of questions asked in this section of the interview may be found in Appendix C. From the information obtained in this section of the interview, the following variables were coded: (1) Dating Frequency (1=never dates; 6=dates very frequently), (2) Steady vs. Non-Steady Dating (1=never dated; 6=presently going steady for a period of more than 6 months), (3) Flirting Skill (1=none, never flirts; 6=strong flirting), (4) Degree Belief (1=no linkage necessary; 6=very strong relationship needed), (5) Peak Heterosexual Experience (1=none; 7=considerable heterosexual experience). The complete scales for these

variables may be found in Appendix D.

INTERVIEW CODING PROCEDURES A male and female coder listened independently to each of the interviews and rated them utilizing the coding manual. Following on this, the intercoder reliabilities were computed. These are given in Table 5.

TABLE 5

Inter-rater Reliability: Interview Codes--Correlation
Male and Female Coders

Scale	Scale Number ^a	Male DATA (N=71)	Female Data (N= 74)
Dating Frequency for Previous Year	114	.93	.91
Steady-Non-Steady Dating	115	.86	.89
Degree of Flirting Skill	116	.76	.79
Verbal Sexual Exhibitorism	117	.70	.76
Degree of Belief in Social Intimacy	119	.83	.57
Peak Heterosexual Behavior	120	.95	.86
Typical Heterosexual Behavior	121	.84	.69

^aFrom original interview coding manual (Zucker, 1967)

RESULTS AND DISCUSSION

Intercorrelations Among Measures of TAT Fantasy for Males

In the following section, results and discussion for males and females are presented separately. This is done in order to facilitate clarity and comparison. A general section will be included to integrate findings for males and females in light of the general problems of the relationship between fantasy and behavior.

Table 6 presents the interrelationships among measures of fantasy sex, aggression and inhibition for males. The number of correlations significant at the 5 per cent level or better exceeds what would be expected by chance. Of the total 325 correlations, 80 (25%) are significant; 24 (7%) are significant at the 5 percent level and 56 (17%) are significant at the 1 percent level. Table 7 lists all the significant interrelationships among variables and allows for a clearer view of what is going on in the matrix.

On a general level, the following relationship hold: Sex and sexual inhibition themes relate positively. Orality themes (injection of solids and liquids, oral need) are positively related to themes of sexual inhibition. Aggression (i.e., "expressive" themes) and sexual inhibition relate positively. The totals for Sex and Aggression reflect the above; both relate positively, with measures of inhibition, at the 1 percent level. The finding that inhibition (indicating defense against impulse expression) appears in conjunction with both sexual and

TABLE 6

**Inter-relationships Among Measures of TAT
Fantasy with Means and Standard
Deviations for Males**

Item No.	Item	Mean	SD	1	2	3
1	Physical Sex Consummation	2.66	4.35			
2	Physical Sex Deprivation	.97	1.64	49**		
3	Non-Physical Sex Consummation	6.61	4.66	33**	19	
4	Non-Physical Sex Deprivation	1.24	1.58	10	03	32**
5	Personal Negative Aftermath	.17	1.00	28*	32**	05
6	Impersonal Negative Aftermath	.32	1.10	48**	30**	25*
7	Avoidance	.85	1.13	-11	-05	27*
8	Negative Associations to Sex	.44	1.19	29*	18	04
9	Physical Aggression	2.56	3.37	15	20	27*
10	Non-Physical Aggression	5.41	3.58	-19	-20	-01
11	Personal Block	.55	1.22	20	17	25*
12	Interpersonal Block	.17	.65	-09	-05	01
13	Time Concern	.65	1.07	-02	-06	05
14	Fear	.69	1.12	-10	-08	20
15	Ingestion Solid	.13	.58	-06	-07	-09
16	Ingestion Liquid	.15	.60	14	08	11
17	Total Ingestion	.28	.88	06	01	02
18	Total Food	.23	.78	13	05	-03
19	Total Sex	11.35	8.78	79**	55**	78**

TABLE 6--Continued

Item No.	Item	Mean	SD	1	2	3
20	Total Physical Sex	3.63	5.35	96**	71**	33**
21	Total Sex Restraints	2.94	2.93	41**	30*	34**
22	Total Aggression	7.97	8.78	-03	-01	16
23	Total Aggression Restraints	3.30	2.69	-10	-15	13
24	Total Inhibition	10.75	6.50	04	-07	24*
25	Oral Need	.11	.43	-07	01	-12
26	Oral Negative Aftermath	.06	.23	06	04	-03

TABLE 6--Continued

Item No.	Item	4	5	6	7	8
5	Personal Negative Aftermath	23*				
6	Impersonal Negative Aftermath	05	-05			
7	Avoidance	09	18	-13		
8	Negative Associations to Sex	04	13	23	-13	
9	Physical Aggression	28*	43**	25*	20	18
10	Non-Physical Aggression	01	-05	00	11	04
11	Personal Block	01	11	14	-09	-08
12	Interpersonal Block	04	-04	-08	-04	-10
13	Time Concern	14	11	-11	00	08
14	Fear	-06	-03	-05	25*	03
15	Ingestion Solid	-11	-04	-07	01	49**
16	Ingestion Liquid	17	-04	30**	12	28*
17	Total Ingestion	04	-06	16	09	52**
18	Total Food	-11	-05	00	-09	31**
19	Total Sex	41**	26*	44**	08	21

TABLE 6--Continued

Item No.	Item	4	5	6	7	8
20	Total Physical Sex	09	32**	49**	-11	29*
21	Total Sex Restraints	13	49**	48**	37**	41**
22	Total Aggression	18	24*	16	20	14
23	Total Aggression Restraints	05	-10	-10	13	18
24	Total Inhibition	04	16	07	37**	20
25	Oral Need	-02	-05	04	-02	15
26	Oral Negative Aftermath	-04	-04	10	14	-04

TABLE 6--Continued

Item No.	Item	9	10	11	12	13
10	Non-Physical Aggression	19				
11	Personal Block	-06	11			
12	Interpersonal Block	-03	19	-12		
13	Time Concern	18	16	17	-16	
14	Fear	15	35**	18	-01	21
15	Ingestion Solid	17	02	-10	-06	12
16	Ingestion Liquid	10	04	29*	-07	11
17	Total Ingestion	18	04	13	-08	15
18	Total Food	-07	-05	-01	-08	08
19	Total Sex	32**	-12	27*	-04	04
20	Total Physical Sex	18	-21	22	-09	-03
21	Total Sex Restraints	34**	20	32**	07	07
22	Total Aggression	76**	79**	03	11	22
23	Total Aggression Restraints	13	06	21	00	25*
24	Total Inhibition	28*	45*	35**	-08	46**
25	Oral Need	06	18	-01	-07	-01
26	Oral Negative Aftermath	-06	06	19	-06	02

TABLE 6--Continued

Item No.	Item	14	15	16	17	18
15	Ingestion Solid	04				.
16	Ingestion Liquid	09	11			
17	Total Ingestion	09	74**	75**		
18	Total Food	02	22	-05	11	
19	Total Sex	04	-10	18	05	04

TABLE 6--Continued

Item No.	Item	14	15	16	17	18
20	Total Physical Sex	-11	-07	14	05	12
21	Total Sex Restraints	21	08	43**	34	01
22	Total Aggression	33**	12	09	14	-08
23	Total Aggression Restraints	40**	06	31**	48**	10
24	Total Inhibition	57**	09	36**	30**	12
25	Oral Need	-02	-06	04	-01	-08
26	Oral Negative Aftermath	23*	-05	45**	27*	-07

TABLE 6--Continued

Item No.	Item	19	20	21	22	23
20	Total Physical Sex	81**				
21	Total Sex Restraints	45**	42**			
22	Total Aggression	12	-03	35**		
23	Total Aggression Restraints	02	-13	15	51**	
24	Total Inhibition	15	01	50**	48**	69**
25	Oral Need	-10	-10	08	16	06
26	Oral Negative Aftermath	01	05	15	00	25*

TABLE 6--Continued

Item No.	Item	24	25	26
20	Total Physical Sex			
21	Total Sex Restraints			
22	Total Aggression			
23	Total Aggression Restraints			
24	Total Inhibition			
25	Oral Need	07		
26	Oral Negative Aftermath	38**	-06	

Note.--Correlations are based on an N of 71 for all variables.

Decimals are omitted for correlations.

*p < .05

**p < .01

TABLE 7

**List of Significant Relationships for each
TAT Variable - Data**

Related Items	r	p ^a
Physical Sex Consummation		
Positively related to:		
Physical Sex Deprivation	49	.01
Impersonal Negative Aftermath	48	.01
Non-Physical Sex Consummation	33	.01
Negative Associations to Sex	29	.05
Personal Negative Aftermath	28	.05
Physical Sex Deprivation		
Positively related to:		
Physical Sex Consummation	49	.01
Personal Negative Aftermath	32	.01
Impersonal Negative Aftermath	30	.01
Non-Physical Sex Consummation		
Positively related to:		
Non-Physical Sex Deprivation	32	.01
Physical Aggression	27	.05
Avoidance	27	.05
Personal Block	25	.05
Impersonal Negative Aftermath	25	.05
Non-Physical Sex Deprivation		
Positively related to:		
Non-Physical Sex Consummation	32	.01
Physical Aggression	28	.05
Personal Negative Aftermath	23	.05

TABLE 7--Continued

Related Items	r	p ^a
Personal Negative Aftermath		
Positively related to:		
Physical Aggression	43	.01
Impersonal Negative Aftermath		
Positively related to:		
Physical Aggression	25	.05
Avoidance		
Positively related to:		
Non-Physical Sex Consummation	27	.05
Total Sex Restraints	37	.01
Total Inhibition	37	.01
Personal Negative Aftermath		
Positively related to:		
Total Sex Restraints	49	.01
Total Physical Aggression	43	.01
Total Physical Sex	32	.01
Physical Sex Deprivation	32	.01
Physical Sex Consummation	28	.05
Impersonal Negative Aftermath		
Positively related to:		
Physical Sex Consummation	48	.01
Physical Sex Deprivation	30	.01
Physical Aggression	25	.05

TABLE 7--Continued

Related Items	r	p ^a
Avoidance		
Positively related to:		
Total Sex Restraint	37	.01
Total Inhibition	37	.01
Non-Physical Sex Consummation	27	.05
Negative Associations to Sex		
Positively related to		
Total Ingestion	52	.01
Ingestion Solid	49	.01
Total Sex Restraints	41	.01
Total Food	31	.01
Physical Sex Consummation	29	.05
Physical Aggression		
Positively related to:		
Total Aggression	76	.01
Personal Negative Aftermath	43	.01
Total Sex Restraints	34	.01
Total Sex	32	.01
Non-Physical Sex Deprivation	28	.05
Total Inhibition	28	.05
Non-Physical Sex Consummation	27	.05
Impersonal Negative Aftermath	26	.05

TABLE 7--Continued

Related Items	r	p ^a
Non-Physical Aggression		
Positively related to:		
Total Aggression	79	.01
Total Inhibition	35	.01
Fear	35	.01
Personal Block		
Positively related to:		
Total Sex Restraints	43	.01
Total Inhibition	35	.01
Ingestion Liquid	29	.05
Total Sex	27	.05
Non-Physical Sex Consummation	25	.05
Time Concern		
Positively related to:		
Total Inhibition	46	.01
Total Aggression Restraints	25	.05
Fear		
Positively related to:		
Total Inhibition	57	.01
Total Aggression Restraints	40	.01
Non-Physical Aggression	35	.01
Total Aggression	33	.01
Avoidance	25	.05
Oral Negative Aftermath	23	.05

TABLE 7--Continued

Related Items	r	p ^a
Ingestion Solid		
Positively related to:		
Total Ingestion	74	.01
Negative Associations to Sex	49	.01
Ingestion of Liquid		
Positively related to:		
Total Ingestion	75	.01
Oral Negative Aftermath	45	.01
Total Sex Restraints	43	.01
Total Inhibition	31	.01
Total Aggression Restraint	31	.01
Impersonal Negative Aftermath	30	.05
Personal Block	29	.05
Negative Associations to Sex	28	.05
Total Ingestion		
Positively related to:		
Ingestion Liquid	75	.01
Ingestion Solid	74	.01
Negative Associations to Sex	52	.01
Total Sex Restraints	34	.01
Total Inhibition	30	.05
Oral Negative Aftermath	27	.05
Total Aggression Restraints	25	.05

TABLE 7--Continued

Related Items	r	p ^a
Total Food		
Positively related to:		
Total Ingestion	38	.01
Negative Associations to Sex	31	.01
Ingestion Solid	26	.05
Total Sex		
Positively related to:		
Total Physical Sex	81	.01
Physical Sex Consummation	79	.01
Non-Physical Sex Consummation	78	.01
Physical Sex Deprivation	54	.01
Total Sex Restraints	45	.01
Impersonal Negative Aftermath	44	.01
Non-Physical Sex Deprivation	41	.01
Physical Aggression	32	.01
Personal Block	27	.05
Personal Negative Aftermath	26	.05
Total Physical Sex		
Positively related to:		
Total Sex	81	.01
Impersonal Negative Aftermath	49	.01
Personal Block	43	.01
Total Sex Restraints	42	.01

TABLE 7--Continued

Related Items	r	p ^a
Physical Sex Consummation	41	.01
Non-Physical Sex Consummation	34	.01
Personal Negative Aftermath	32	.01
Physical Sex Deprivation	30	.05
Negative Associations to Sex	29	.05
Total Sex Restraints		
Positively related to:		
Total Inhibition	50	.01
Personal Negative Aftermath	49	.01
Impersonal Negative Aftermath	38	.01
Total Sex	45	.01
Ingestion Liquid	43	.01
Personal Block	42	.01
Physical Sex Consummation	41	.01
Negative Associations to Sex	41	.01
Avoidance	37	.01
Total Aggression	35	.01
Non-Physical Sex Consummation	34	.01
Physical Aggression	34	.01
Total Ingestion	34	.01
Physical Sex Deprivation	30	.05

TABLE 7--Continued

Related Items	r	p ^a
Total Aggression		
Positively related to:		
Non-Physical Aggression	79	.01
Physical Aggression	76	.01
Total Aggression Restraints	51	.01
Total Inhibition	48	.01
Total Sex Restraints	35	.01
Fear	35	.01
Personal Negative Aftermath	24	.05
Total Aggression Restraints		
Positively related to:		
Total Inhibition	69	.01
Total Aggression	51	.01
Fear	40	.01
Ingestion Liquid	31	.01
Time Concern	25	.05
Total Ingestion	25	.05
Oral Negative Aftermath	25	.05
Total Inhibition		
Positively related to:		
Total Aggression Restraints	69	.01
Fear	57	.01
Total Sex Restraints	50	.01
Total Aggression	48	.01
Time Concern	47	.01

TABLE 7--Continued

Related Items	r	p ^a
Non-Physical Aggression	45	.01
Oral Negative Aftermath	38	.01
Avoidance	37	.01
Ingestion Liquid	36	.01
Personal Block	35	.01
Total Ingestion	30	.05
Physical Aggression	28	.05
Non-Physical Sex Consummation	24	.05
Oral Negative Aftermath Positively related to:		
Ingestion Liquid	45	.01
Total Inhibition	38	.01
Total Ingestion	27	.05
Total Aggression Restraints	25	.05
Fear	23	.05

Note.--Decimals omitted.

aggressive impulses lends some support to the finding of Barclay and Haber (1965) where defenses "...accompanied an increase in (impulse) imagery, rather than a decrease." In addition, Physical Aggression (involving hostile contact between persons) relates positively at the 5 percent level to non-physical sex imagery, again, lending indirect support to the above study. Physical Sex Deprivation relates also to Physical Aggression but shows a negative relation to Non-Physical Aggression.

In brief, this general overview suggests that within the same subject, there is a strong tendency for impulsive expressive imagery to appear in conjunction with inhibitory themes. This applies across the various classes of impulse (i.e., orality, sex and aggression). Certain classes of impulse (orality and aggression) are also correlated with inhibitions concerning sex where the reversed relationships do not necessarily hold. One way to look at this is that "punishment" may accompany expression of sexual impulse and punishment is often in the form of some physical mishap.

Examination of the clusters of variables indicates that other factors complicate these interrelationships among fantasy classes. There are two major clusters and these have both commonality and differences.

In the first cluster, Physical Sex Consumption relates equally strongly with drive (Physical Sex Deprivation) and inhibition imagery (Impersonal Negative Aftermath). Here, the most direct expression of drive relates with a measure of guilt involving punishment or mishap from external sources.

Two other variables, related in this cluster, deserve comment: Non-Physical Sex Consummation and Negative Association to Sex. The former variable may be seen as a measure of affiliative need or need for interpersonal mutuality (e.g., "...he wants to share experiences with her...") rather than need for sex contact per se. The inclusion of such affiliative imagery in a cluster involving specific sexual imagery seems reasonable; affiliative behavior normally precedes and interrelates with sexual encounters. As can be seen from the second cluster (see below) as well as general observations, affiliative needs in fantasy do not necessarily lead to or involve sexual imagery.

The second variable of interest is Negative Association to Sex. According to the author of the coding scheme (Kalin, 1964) it was difficult to categorize this variable into either sex or aggression imagery since it involves both a sexual referent and negative or hurtful affect.

The second cluster is similar to the first insofar as impulse and inhibition are associated. Non-Physical Sex Consummation relates equally strongly to both Non-Physical Sex Deprivation and to measures of inhibition (Avoidance and Personal Block). Here again, the relationship between sexual and aggressive motivation is manifest. Physical Aggression is also associated with this cluster, corresponding in part to the appearance of negative association to sex in the first.

The important difference between these two clusters (beyond the difference between Physical and Non-Physical Sex Imagery) is suggested by an examination of the two types of inhibition imagery which appear differentially. The first cluster involved Personal and Impersonal

Negative Aftermath as well as Negative Association to Sex (i.e., "his wife has syphilis..."). These inhibitory themes might be seen as *ex-post facto* or retaliatory themes - something happens following impulse expression. The second cluster involves Avoidance and Personal Block, i.e., "true inhibition" in the sense that prevention of occurrence is implied; for example "...she won't be able to let herself go to bed with him." Thus the cluster involving the most direct form of sexual imagery (Physical Sex) is associated with impersonal, externalized retaliatory imagery and self-punishment (i.e., "...he will leave her room and get hit by a bus"). The other cluster involves the less intense and more socially influenced non-physical sex imagery. This is associated with true inhibitory themes (blocks). This suggests that the classes of fantasy may be related not only by involving both impulse and inhibition but by a dimension of the intensity of experience within given subjects. All subjects experience imagery of impulsive and inhibitory nature; the subjects whose experience with impulse is most intense are those who experience the more intense forms of guilt and vice versa.

The simultaneous appearance of impulse and inhibition in TAT fantasy points to a well-documented consideration. TAT fantasy in a normal subject population is largely dominated by secondary thought processes in turn influenced by adaptive considerations, logical thinking and the consideration of the social acceptability of responses (stories). This secondary thinking reflects the realities of the interpersonal world from which the secondary processes were derived. This would suggest that while it is feasible to study the primary drives

utilizing thematic stories, it would not be wise to expect pronounced, clear-cut relationships which might occur in the case of the raw naked expression of drives in fantasy (e.g. as in dreams, nightmares, drug studies, etc.).

In light of the above, it may be that the best dimension along which to evaluate fantasy production would be a "primary-process-secondary-process" dimension. Sex and aggressive themes both relate similarly, and positively to inhibition. These relationships may be seen as reflecting both the primary and secondary process types of thinking (derivatives) which are influenced, in theory, by the consideration of (1) immediate gratification of impulses and (2) adaptive restraint. The specific type of impulse, representing basic needs, is immaterial and impulses may be interchangeable (Freud, S., 1915). On the other hand, secondary process thinking, representing the "reality principle" determines "adaptive, goal-directed responses" (Kalin, 1964). The relationship of impulses to inhibition reflects the interaction and mutual influence of these two kinds of thought processes. The co-occurrence of the two may reflect a relatively "normal" subject population while a lack of relationship or a negative one may reflect a more pathologic adaptation.

Interrelationships Among Measures of Overt Sexual Behavior for Males.

Table 8 presents the interrelationships between measures of overt sexual behavior for males. The number of correlations among these variables, significant at the 5 percent level or better exceeds what would be expected by chance. Of the 45 possible correlations, 4 (11%) are significant at the 5 percent level of confidence, and 36 (80%) are

TABLE 8

Inter-relationships Among Measures of Overt
Sexual Behavior With Means and Standard
Deviations for Male Data⁵

Item No.	Item	Mean	SD	1	2	3
1	Frequency Necking	44.16	55.53			
2	Frequency Petting	27.50	34.63	55**		
3	Frequency Intercourse	8.36	25.52	34**	63**	
4	Dating Frequency	8.16	2.27	48**	51**	27*
5	Steady-Non-Steady Dating	7.33	2.87	41**	29*	12
6	Flirting Skill	5.83	1.89	34**	41**	20
7	Verbal Sexual Exhibitionism	5.75	1.86	34**	23	32**
8	Degree Belief in Social Intimacy	5.69	2.43	38**	-27*	-22
9	Peak Heterosexual Experience	8.80	3.71	45**	45**	32**
10	Typical Heterosexual Experience	5.94	2.19	59**	54**	49**

TABLE 8--Continued

Item No.	Item	4	5	6	7	8	9	10
1	Frequency Necking							
2	Frequency Petting							
3	Frequency Intercourse							
4	Dating Frequency							
5	Steady-Non-Steady Dating	74**						
6	Flirting Skill	69**	50**					
7	Verbal Sexual Exhibitionism	38**	30*	53**				
8	Degree Belief in Social Intimacy	-36**	-22	-60**	-51**			
9	Peak Heterosexual Experience	59**	37**	69**	56**	-69**		
10	Typical Heterosexual Experience	60**	36**	69**	60**	-62**	85**	

Note.--Correlations are based on N=69 for all variables. Decimals are omitted. Variables 1-3 are from questionnaire data. Variables 4-10 are interview rating scales.

*p < .05

**p < .01

TABLE 9

List of Significant Relationships for each
Overt Sexual Behavior Variable - Male Data

Total Frequency Necking (Quest.)		
Positively related to:		
<u>S</u> report of typical sex behavior	59 ^a	.01
Total frequency petting	55	.01
<u>S</u> report Dating frequency last year	48	.01
<u>S</u> report Hetero (Peak) Experience	45	.01
<u>S</u> report Steady-Non-Steady Dating	41	.01
Extent Flirting Skill	34	.01
Total Frequency Intercourse	34	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-38	.01
 Total Frequency Petting (Quest.)		
Positively related to:		
Total Frequency Intercourse	63	.01
<u>S</u> report of Typical Sex Behavior	54	.01
<u>S</u> report Dating Frequency last year	51	.01
<u>S</u> report Hetero (Peak) Experience	45	.01
Extent of Flirting Skill	41	.01
<u>S</u> Report Steady-Non-Steady Dating	29	.05
Negatively related to:		
Degree Belief in Sex Social Intimacy	-27	.05
 Total Frequency Intercourse (Quest.)		
Positively related to:		
<u>S</u> Report of Typical Sex Behavior	49	.01
Verbal Sexual Exhibitionism	32	.01
<u>S</u> Report Hetero (Peak) Experience	32	.01
<u>S</u> Report Frequency Dating last year	27	.05
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-22	.10

TABLE 9--Continued

<u>S</u> Report Dating Frequency in Previous Year (Int.)		
Positively related to:		
<u>S</u> Report Steady-Non-Steady Dating	74	.01
Extent of Flirting Skill	69	.01
<u>S</u> Report Typical Sex Behavior	60	.01
<u>S</u> Report Hetero (Peak) Experience	59	.01
Verbal Sexual Exhibitionism	38	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-36	.01
 <u>S</u> Report Steady-Non-Steady Dating (Int.)		
Positively related to:		
Extent of Flirting Skill	50	.01
<u>S</u> Report Hetero (Peak) Experience	37	.01
<u>S</u> Report Typical Sex Behavior	36	.01
Verbal Sexual Exhibitionism	30	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-22	.10
 Extent of Flirting Skill (Int.)		
Positively related to:		
<u>S</u> Report Hetero (Peak) Experience	69	.01
<u>S</u> Report Typical Sex Behavior	69	.01
Verbal Sexual Exhibitionism	53	.01
Negatively related to:		
Degree of Belief in Sex-Social Intimacy	-60	.01
 Verbal Sexual Exhibitionism (Int.)		
Positively related to:		
<u>S</u> Report Typical Sex Behavior	60	.01
<u>S</u> Report Hetero (Peak) Experience	56	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-51	.01

TABLE 9--Continued

Degree Belief in Sexual-Social Intimacy Connection (Int.)		
Negatively related to:		
<u>S</u> Report Hetero (Peak) Experience	-69	.01
<u>S</u> Report of Typical Sex Behavior	-62	.01
 <u>S</u> Report of (Peak) Heterosexual Experience (Int.)		
Positively related to:		
<u>S</u> Report of Typical Sex Behavior	85	.01

^aNote.--Decimals are omitted for correlations.

significant at the .01 level. Considering the relationships between interview and questionnaire data, there are 24 possible correlations. Of these 3 (13%) are significant at the 5 percent level of confidence and 17 (71%) are significant at the .01 level. There are 3 possible correlations involving only questionnaire variables and all are significant at the .01 level. There are 21 possible correlations involving interview codes alone; one is significant at the .05 level and 20 are significant at the .01 level.

One immediate question for consideration is the relative validity of the two forms of measurement used here. To what extent do self-report questionnaire responses coincide with ratings of overt sexual behavior by raters based on interview material? The two variables which seem best for answering this are the frequency of intercourse data obtained from the questionnaire and the raters' scores of "Peak" heterosexual experience (the "most" an individual has done) derived from the interview. When these are both treated as continuous variables, for males, $r = .32$ ($p < .01$). When Ss are classified as having had some vs. no experience with intercourse on the questionnaire measure a point biserial correlation can be performed. This index offers some measure of the degree to which (1) the reports of S are "honest" from one situation to the next and (2) the extent to which raters are being too "liberal" or too "conservative" in their interpretations of Ss' verbal reports. For male data, $r_{pb} = .69$ ($p < .01$) suggesting that those who admitted intercourse on the questionnaire did tend to get higher pooled scores by raters in terms of their "Peak" behavior. Of the sample of

males, 38% admitted some experience with heterosexual intercourse in the previous year. The median number of intercourse experiences is 3. Between Peak heterosexual behavior and petting, $r=.45$, $p<.01$ and $r_{pb}=.73$. Between Peak and Necking $r=.45$ and $r_{pb}=.47$ ($p<.01$).

Table 9 lists all of the significant intercorrelations and allows for a clearer view of what is going on in the matrix. The following relationships are obtained from an inspection of the intercorrelations involving questionnaire measures of overt sexual behavior (during the previous year). The three variables of greatest concern are necking (considered to be the mildest form of physical sexual behavior), petting and intercourse. These are derived from the questionnaire. Necking is positively related to intercourse ($r=.34$, $p<.01$) as is petting ($r=.63$, $p<.01$). The difference between the relationships of these two variables with intercourse is significant ($t=2.71$, $p<.01$ using a non-directional test). This not too surprising finding shows that petting is more related to experience with intercourse and may suggest that necking behavior is much more common and may carry a different social connotation than intercourse. This is in accord with common sense.

The interview variable "Dating Frequency in the last year" relates equally strongly with frequency of necking and frequency of petting ($r=.48$, $p<.01$ for the former and $r=.51$, $p<.01$ for the latter) and less strongly with intercourse ($r=.27$, $p<.05$). This seems logical given the generally high frequency and acceptability in adolescent populations of the two less intense forms of overt sexual behavior. Contrary

to what might seem a common assumption the degree to which subjects showed steady dating experience (either past or present) related inversely with the intensity of the sexual experience. Steady-Non-steady dating was positively related to necking ($r=.41$, $p<.01$) and less strongly related to petting ($r=.29$, $p<.05$). The relationship between steady-non-steady dating and intercourse was non-significant. One explanation is in the following form: it is the less stable subjects, i.e., those who are less able to maintain a long-term relationship, who have the more intense but less socially meaningful sexual experiences. This is entirely consistent with the relationship found between intercourse and antisocial behavior in other studies. (e.g., Zucker & Fillmore, 1968; Kulick, Stein & Sarbin, 1968). It may be that for many adolescents, both males and females, intense sexual involvement puts more of a strain on the relationships than they can stand. Thus, if a "steady date" is to remain "steady," certain commitments are going to have to be avoided. Those subjects who had a steady would tend to avoid behaviors which would potentially weaken a relationship. Another hypothesis concerns the function of certain social patterns: steady dating may serve status or security functions rather than sexual ones in a given social setting.

The variable "Flirting Skill" related to necking ($r=.34$, $p<.01$) and petting ($r=.41$). As will be pointed out below, the Degree of Belief in the sex-social intimacy connection variable related negatively to all forms of overt sexual behavior. Among interview variables, the following relationships hold true. Subjects' reports of Dating Frequency in the last year were positively related to the report of steady-non-steady

dating ($r=.74$, $p < .01$). Dating Frequency was related strongly to Flirting Skill ($r=.69$, $p < .01$) as was "Peak" behavior ($r=.59$).

When steady dating is considered, the pattern of relationships is similar to that for dating frequency. Heterosexual peak experience and S report of typical behavior relate equally strongly ($p < .01$) with the degree of steady dating experience.

In brief there is a high degree of interrelationship among the variables of overt sexual behavior. These relationships hold for questionnaire and interview variables, considered separately and together. The significant point biserial correlations between questionnaire variables and "Peak heterosexual behavior" as determined in the interview suggests that subject reports of sexual experience were consistent from one situation to the next and that raters were not being too "liberal" or "conservative" in judgments of reports.

It seems logical to expect that these behavioral measures would relate to a high degree. Except for intercourse, all of the behavioral classes can be seen as being part of the adolescent sub-culture. Not only are some of the behaviors so common as to include nearly all subjects (e.g., necking) but they may also be seen as providing the opportunity for the next more intense form--i.e., necking may, under some conditions, "turn into" petting. It is difficult to draw distinct lines between some of these behaviors (e.g., to specify where "dating" stops and "steady dating" begins). An additional conclusion, suggested by the infrequency of intercourse, is that these behaviors reflect, in addition to sexual factors, social considerations such as need for affiliation and the well known conformity among adolescents.

Interrelationships Among TAT Variables and Measures of Overt Sexual Behavior for Males.

Table 10 presents the interrelationships among the fantasy measures and Overt Sexual Behavior for males. The number of significant correlations among these variables did not exceed what would be expected by chance. Of a total of 260 possible correlations only 7 (3%) were significant at the 5 percent level. Of 78 correlations between TAT and Questionnaire variables, 2 were significant. Of 182 correlations between TAT and Interview variables, 5 were significant.

In short, there was no relationship between the fantasy and behavioral classes measured. There are two considerations and both are operative. The population is too young to have participated in frequent sexual intercourse. In this way, there was little in the way of "purely" sexual behavior to correlate with fantasy. The high correlation, in fantasy, between impulse and inhibition (expression and restraint) suggests that it is this co-occurrence that should be considered when discussing the relationship between fantasy and behavior. When both the frequency of intercourse and the complex relationships among fantasy classes are considered, it appears that only in the case of imbalance (e.g., a predominance of either expressive or restraining imagery) should a relationship between sexual fantasy and sexual behavior occur. In the present sample of normal youngsters, no such imbalance occurred and as might be expected, the frequency of intercourse was low. Two attempts were made to explore this explanation more fully. The possibility exists that in order to study the relationships between fantasy measures and overt behavior, only those Ss

TABLE 10

Inter-relationships Among TAT Variables
and Measures of Overt Sexual Behavior for Males

Item	Necking	Petting	Intercourse
Physical Sex Consummation	-08	03	10
Physical Sex Deprivation	-11	01	04
Non-Physical Sex Consummation	00	03	26*
Non-Physical Sex Deprivation	-09	-09	05
Personal Negative Aftermath	-09	-08	-04
Impersonal Negative Aftermath	01	09	09
Avoidance	21	18	00
Negative Associations to Sex	01	-07	-05
Physical Aggression	-09	-02	-04
Non-Physical Aggression	-14	-03	-10
Personal Block	-17	-03	14
Interpersonal Block	-07	02	-07
Time Concern	-15	-08	02
Fear	13	-01	-06
Ingestion Solid	-05	-04	-05
Ingestion Liquid	01	22	32**
Total Ingestion	-03	13	19
Total Food	01	02	21
Total Sex	-16	00	18
Total Physical Sex	-10	02	09

TABLE 10--Continued

Item	Necking	Petting	Intercourse
Total Sex Restraints	05	04	06
Total Aggression	14	03	09
Total Aggression Restraints	17	01	11
Total Inhibition	07	06	10
Oral Need	20	04	-02
Oral Negative Aftermath	03	23	19

TABLE 10--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Physical Sex Consummation	-13	21	-11	07
Physical Sex Deprivation	-12	-24*	20	-03
Non-Physical Sex Consummation	-04	02	-10	-02
Non-Physical Sex Deprivation	-04	-07	-03	11
Personal Negative Aftermath	-01	-04	-05	-04
Impersonal Negative Aftermath	04	-09	-01	20
Avoidance	03	09	14	01
Negative Associations to Sex	06	02	08	09
Physical Aggression	04	-05	01	-04
Non-Physical Aggression	03	01	11	06
Personal Block	-05	02	-31**	-10
Interpersonal Block	-01	-14	-01	-15
Time Concern	03	06	-13	24
Fear	-02	-04	-17	-17
Ingestion Solid	04	-09	06	-04
Ingestion Liquid	13	01	00	09
Total Ingestion	12	-05	04	04
Total Food	05	01	-03	03
Total Sex	-14	-18	-18	01
Total Physical Sex	-15	-24*	-15	05
Total Sex Restraints	07	07	01	06

TABLE 10--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Total Aggression	05	-02	09	02
Total Aggression Restraints	00	-04	02	11
Total Inhibition	08	05	04	-04
Oral Need	14	18	20	20
Oral Negative Aftermath	04	-18	02	03

TABLE 10--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Physical Sex Consummation	00	-01	09
Physical Sex Deprivation	06	-05	02
Non-Physical Sex Consummation	03	-11	05
Non-Physical Sex Deprivation	-17	18	27*
Personal Negative Aftermath	-01	09	02
Impersonal Negative Aftermath	00	-01	09
Avoidance	-03	07	13
Negative Associations to Sex	-19	08	08
Physical Aggression	-24	22	20
Non-Physical Aggression	-07	01	-05
Personal Block	20	-18	-14
Interpersonal Block	-01	-08	-05
Time Concern	13	-14	-07
Fear	02	-13	-16
Ingestion Solid	-12	09	-02
Ingestion Liquid	-03	09	23
Total Ingestion	-09	12	14
Total Food	-14	07	14
Total Sex	02	-06	08
Total Physical Sex	02	-02	08
Total Sex Restraints	-05	03	14

TABLE 10--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Total Aggression	-20	14	08
Total Aggression Restraints	-10	-05	-01
Total Inhibition	01	-08	01
Oral Need	-23	21	24*
Oral Negative Aftermath	06	00	09

Note.--Correlations are based on $N=69$ for all variables. Decimals are omitted.

* $p < .05$

** $p < .01$

Negative Aftermath, Impersonal Negative Aftermath and Negative Associations to Sex. The ratio of this "package" allotted to impulse (sex) was correlated with three behavioral variables: Peak, Petting and Intercourse. A representative sample of these correlations were performed with the result that none of the correlations achieved significance. This data may be seen in Appendix E. The issue, thus becomes one of attempting to correlate primary process dominance or secondary process dominance with sexual behavior rather than specific classes of fantasy with behavior. In a normal sample given low frequency of specifically sexual behavior, the relationship between fantasy and behavior should be expected to be low.

The second consideration is a methodological one. Since a correlation is dependent on the amount of common variance shared by two variables, a significant correlation should not be expected when the variables are derived on different levels of conceptualization. Such is the case when a variable such as dating frequency, strongly influenced by social factors, is related to physical sex fantasy and inhibition, influenced by hormonal factors as well as early developmental experiences (e.g., punishment or shame for asking sex-related questions). This methodological consideration does not negate the first. When considered with the first it leads to more refined guidelines and hypotheses for future research. Relationships between fantasy and behavior can be expected to occur when the following conditions are met: (1) conceptual equivalence of variables (e.g., physical sex fantasy and orgasm rate), (2) non-normal populations with respect to fantasy and (3) adequate opportunity for subjects to experience the most intense forms of sexual behavior with a reasonable frequency.

Relationship Between TAT Measures of Fantasy, OSB and Socio-economic Status for Males

Table 11 presents the intercorrelations of fantasy measures of sex, aggression, orality and inhibition, overt sexual behavior and socio-economic status. One consideration of importance is the possibility that social class moderates the relationship between fantasy and behavior. Mussen, Conger and Kagan (1963) discuss the issue of the ability of youngsters to delay gratification (super-ego development) and conclude that higher SES youngsters are more able to delay because long term goals are more frequently rewarded in the higher social classes. Social class is also related to values concerning appropriate sexual behavior and to the occurrence of sexual behavior itself, though with noted differences between males and females (Kinsey, 1948; Mussen, Conger and Kagan, 1963, p. 531 ff). The possibility further exists that some of the factors associated with social class influence fantasy production as well. Specifically, the ability to delay gratification may mean a greater amount of restraining imagery will appear in conjunction with impulsive imagery.

Among males in the present study, there is a positive relationship between SES and measures of both aggression and inhibition. Higher social class relates positively to Negative Associations to Sex ($r=.29$, $p<.05$), Physical Aggression ($r=.24$, $p<.05$), Non-physical Aggression ($r=.23$, $p<.10$), Time Concern ($r=.22$, $p<.10$), Fear ($r=.28$, $p<.05$) and the measures of orality Ingestion of Solid ($r=.21$, $p<.10$) and Total Ingestion ($r=.25$, $p<.05$). Total Aggression and Total Inhibition relate below the

TABLE 11

Relationships Between Socio-Economic Status,
Measures of Overt Sexual Behavior and Fantasy for Males³

Items	r	p
Physical Sex Consummation	-03	
Physical Sex Deprivation	02	
Non-Physical Sex Consummation	00	
Non-Physical Sex Deprivation	-01	
Personal Block	10	
Interpersonal Block	-07	
Personal Negative Aftermath	11	
Impersonal Negative Aftermath	16	
Avoidance	13	
Negative Associations to Sex	29	05
Physical Aggression	24	05
Non-Physical Aggression	23	10
Time Concern	22	10
Fear	28	05
Ingestion of Solid	21	10
Ingestion of Liquid	16	
Total Ingestion	25	05
Total Food	01	
Total Sex	04	
Total Physical Sex	01	

TABLE 11--Continued

Items	r	p
Total Sex Restraints	32	01
Total Aggression	31	01
Total Inhibition	40	01
Oral Need	14	
Oral Negative Aftermath	09	
Total Aggression Restraint	25	05
Frequency of Intercourse	-22	10 ^a
Frequency of Necking	02	
Frequency of Petting	01	
Dating Frequency for Previous Year	-10	
Steady-Non-Steady Dating	-04	
Degree of Flirting Skill	-06	
Verbal Sexual Exhibitionism	-11	
Degree of Belief in Social Intimacy	-05	
Peak Heterosexual Behavior	-05	
Typical Heterosexual Behavior	-09	

Note.--"SES" has an inverse scale in which high social status is associated with a low score. The correlations presented represent the actual relationship between the two variable i.e., have the sign reversed. Decimals are omitted. Correlations involving fantasy variables based on N=71, OSB variables, N=69.

^a Correlation based on data involving non-drinking situations. Same correlation across both drinking and non-drinking situations=.26
p<.05.

1 percent level with SES ($r=.31$ for the former and $.40$ with the latter). The frequency of intercourse is negatively related to SES ($r=.26$, $p<.05$). The latter finding is in accord with those of Kagan and Moss (1962) and Kinsey, et al., (1948). This negative relationship is consistent also with the finding of a positive relationship between SES and negative associations to sex, since presumably, attitudes concerning behavior exert an influence on the likelihood of its occurrence.

Is the combination of impulse and inhibition some function of social class? To answer this question the following variables were totaled to yield a single score: Total Sex, Total Aggression, Total Ingestion and Total Inhibition. A positive correlation results between this "package" and SES ($r=.34$, $p<.01$) suggesting again that as one goes up the social scale, impulse and inhibition themes in thematic fantasy tend to be more strongly associated among male Ss. This is consistent with the finding of positive correlations between aggression, inhibition and SES when the two fantasy variables are treated separately. Two explanations can account for this. The first concerns the emphasis on education and verbal fluency which marks the higher social groups; an increase in different classes of imagery results because the middle class youngster is more able to convey complex human interaction in stories, is verbally more fluent, etc. The second consideration concerns socialization factors across levels of social status; higher class youngsters are more often negatively rewarded for the expression of impulse than are lower class youngsters, or are raised in such a way as to foster increased amounts of guilt when they express impulses. No doubt some combination of these factors are involved

TABLE 10--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Physical Sex Consummation	-13	21	-11	07
Physical Sex Deprivation	-12	-24*	20	-03
Non-Physical Sex Consummation	-04	02	-10	-02
Non-Physical Sex Deprivation	-04	-07	-03	11
Personal Negative Aftermath	-01	-04	-05	-04
Impersonal Negative Aftermath	04	-09	-01	20
Avoidance	03	09	14	01
Negative Associations to Sex	06	02	08	09
Physical Aggression	04	-05	01	-04
Non-Physical Aggression	03	01	11	06
Personal Block	-05	02	-31**	-10
Interpersonal Block	-01	-14	-01	-15
Time Concern	03	06	-13	24
Fear	-02	-04	-17	-17
Ingestion Solid	04	-09	06	-04
Ingestion Liquid	13	01	00	09
Total Ingestion	12	-05	04	04
Total Food	05	01	-03	03
Total Sex	-14	-18	-18	01
Total Physical Sex	-15	-24*	-15	05
Total Sex Restraints	07	07	01	06

TABLE 10--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Total Aggression	05	-02	09	02
Total Aggression Restraints	00	-04	02	11
Total Inhibition	08	05	04	-04
Oral Need	14	18	20	20
Oral Negative Aftermath	04	-18	02	03

TABLE 10--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Physical Sex Consummation	00	-01	09
Physical Sex Deprivation	06	-05	02
Non-Physical Sex Consummation	03	-11	05
Non-Physical Sex Deprivation	-17	18	27*
Personal Negative Aftermath	-01	09	02
Impersonal Negative Aftermath	00	-01	09
Avoidance	-03	07	13
Negative Associations to Sex	-19	08	08
Physical Aggression	-24	22	20
Non-Physical Aggression	-07	01	-05
Personal Block	20	-18	-14
Interpersonal Block	-01	-08	-05
Time Concern	13	-14	-07
Fear	02	-13	-16
Ingestion Solid	-12	09	-02
Ingestion Liquid	-03	09	23
Total Ingestion	-09	12	14
Total Food	-14	07	14
Total Sex	02	-06	08
Total Physical Sex	02	-02	08
Total Sex Restraints	-05	03	14

TABLE 10--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Total Aggression	-20	14	08
Total Aggression Restraints	-10	-05	-01
Total Inhibition	01	-08	01
Oral Need	-23	21	24*
Oral Negative Aftermath	06	00	09

Note.--Correlations are based on N=69 for all variables. Decimals are omitted.

*p < .05

**p < .01

admitting sexual experience should be considered. In this way, more pronounced relationships might appear. Based on this consideration, a representative sample of 22 chi squares were performed. These tests were performed on the variables by performing median-splits on each variable (excluding subjects falling in the zero-order sex category). The results indicated that the relationships were no stronger. Only one of the sample of chi squares was statistically significant. This is in part due to the fact that when those subjects admitting no sexual behavior were omitted, cells were quite small.

A further possibility exists that the relationship between fantasy and behavior might be explored using a measure of the relative dominance of impulse over inhibition and vice versa. This is based in part on the work of Purcell (1956) who compared different forms of punishment imagery (TAT) with overt aggressive behavior. Judging from the inter-relationships among measures of TAT fantasy, impulse and inhibition are significantly correlated, at least in the population of high school youngsters under study. The two types of thematic material may be seen as a psychological "package." Some ratio of this impulse-inhibition package is allotted to impulse and this ratio can be correlated with measures of overt behavior. For example, a subject's score for Total Sex was the sum of: Physical Sex Consummation, Physical Sex Deprivation, Non-Physical Sex Consummation and Non-Physical Sex Deprivation. This value was some portion of the value achieved by combining it with Total Sex Restraints. The latter variable was the sum of: Personal Block, Impersonal Block, Interpersonal Block, Avoidance, Personal

Negative Aftermath, Impersonal Negative Aftermath and Negative Associations to Sex. The ratio of this "package" allotted to impulse (sex) was correlated with three behavioral variables: Peak, Petting and Intercourse. A representative sample of these correlations were performed with the result that none of the correlations achieved significance. This data may be seen in Appendix E. The issue, thus becomes one of attempting to correlate primary process dominance or secondary process dominance with sexual behavior rather than specific classes of fantasy with behavior. In a normal sample given low frequency of specifically sexual behavior, the relationship between fantasy and behavior should be expected to be low.

The second consideration is a methodological one. Since a correlation is dependent on the amount of common variance shared by two variables, a significant correlation should not be expected when the variables are derived on different levels of conceptualization. Such is the case when a variable such as dating frequency, strongly influenced by social factors, is related to physical sex fantasy and inhibition, influenced by hormonal factors as well as early developmental experiences (e.g., punishment or shame for asking sex-related questions). This methodological consideration does not negate the first. When considered with the first it leads to more refined guidelines and hypotheses for future research. Relationships between fantasy and behavior can be expected to occur when the following conditions are met: (1) conceptual equivalence of variables (e.g., physical sex fantasy and orgasm rate), (2) non-normal populations with respect to fantasy and (3) adequate opportunity for subjects to experience the most intense forms of sexual behavior with a reasonable frequency.

Relationship Between TAT Measures of Fantasy, OSB and Socio-economic Status for Males

Table 11 presents the intercorrelations of fantasy measures of sex, aggression, orality and inhibition, overt sexual behavior and socio-economic status. One consideration of importance is the possibility that social class moderates the relationship between fantasy and behavior. Mussen, Conger and Kagan (1963) discuss the issue of the ability of youngsters to delay gratification (super-ego development) and conclude that higher SES youngsters are more able to delay because long term goals are more frequently rewarded in the higher social classes. Social class is also related to values concerning appropriate sexual behavior and to the occurrence of sexual behavior itself, though with noted differences between males and females (Kinsey, 1948; Mussen, Conger and Kagan, 1963, p. 531 ff). The possibility further exists that some of the factors associated with social class influence fantasy production as well. Specifically, the ability to delay gratification may mean a greater amount of restraining imagery will appear in conjunction with impulsive imagery.

Among males in the present study, there is a positive relationship between SES and measures of both aggression and inhibition. Higher social class relates positively to Negative Associations to Sex ($r=.29$, $p<.05$), Physical Aggression ($r=.24$, $p<.05$), Non-physical Aggression ($r=.23$, $p<.10$), Time Concern ($r=.22$, $p<.10$), Fear ($r=.28$, $p<.05$) and the measures of orality Ingestion of Solid ($r=.21$, $p<.10$) and Total Ingestion ($r=.25$, $p<.05$). Total Aggression and Total Inhibition relate below the

TABLE 11

Relationships Between Socio-Economic Status,
Measures of Overt Sexual Behavior and Fantasy for Males³

Items	r	p
Physical Sex Consummation	-03	
Physical Sex Deprivation	02	
Non-Physical Sex Consummation	00	
Non-Physical Sex Deprivation	-01	
Personal Block	10	
Interpersonal Block	-07	
Personal Negative Aftermath	11	
Impersonal Negative Aftermath	16	
Avoidance	13	
Negative Associations to Sex	29	05
Physical Aggression	24	05
Non-Physical Aggression	23	10
Time Concern	22	10
Fear	28	05
Ingestion of Solid	21	10
Ingestion of Liquid	16	
Total Ingestion	25	05
Total Food	01	
Total Sex	04	
Total Physical Sex	01	

TABLE 11--Continued

Items	r	p
Total Sex Restraints	32	01
Total Aggression	31	01
Total Inhibition	40	01
Oral Need	14	
Oral Negative Aftermath	09	
Total Aggression Restraint	25	05
Frequency of Intercourse	-22	10 ^a
Frequency of Necking	02	
Frequency of Petting	01	
Dating Frequency for Previous Year	-10	
Steady-Non-Steady Dating	-04	
Degree of Flirting Skill	-06	
Verbal Sexual Exhibitionism	-11	
Degree of Belief in Social Intimacy	-05	
Peak Heterosexual Behavior	-05	
Typical Heterosexual Behavior	-09	

Note.--"SES" has an inverse scale in which high social status is associated with a low score. The correlations presented represent the actual relationship between the two variable i.e., have the sign reversed. Decimals are omitted. Correlations involving fantasy variables based on N=71, OSB variables, N=69.

^aCorrelation based on data involving non-drinking situations. Same correlation across both drinking and non-drinking situations=.26
p<.05.

1 percent level with SES ($r=.31$ for the former and $.40$ with the latter). The frequency of intercourse is negatively related to SES ($r=.26$, $p<.05$). The latter finding is in accord with those of Kagan and Moss (1962) and Kinsey, et al., (1948). This negative relationship is consistent also with the finding of a positive relationship between SES and negative associations to sex, since presumably, attitudes concerning behavior exert an influence on the likelihood of its occurrence.

Is the combination of impulse and inhibition some function of social class? To answer this question the following variables were totaled to yield a single score: Total Sex, Total Aggression, Total Ingestion and Total Inhibition. A positive correlation results between this "package" and SES ($r=.34$, $p<.01$) suggesting again that as one goes up the social scale, impulse and inhibition themes in thematic fantasy tend to be more strongly associated among male Ss. This is consistent with the finding of positive correlations between aggression, inhibition and SES when the two fantasy variables are treated separately. Two explanations can account for this. The first concerns the emphasis on education and verbal fluency which marks the higher social groups; an increase in different classes of imagery results because the middle class youngster is more able to convey complex human interaction in stories, is verbally more fluent, etc. The second consideration concerns socialization factors across levels of social status; higher class youngsters are more often negatively rewarded for the expression of impulse than are lower class youngsters, or are raised in such a way as to foster increased amounts of guilt when they express impulses. No doubt some combination of these factors are involved

in determining the relationships among classes of fantasy.

The factor of social status appears to be less important when the relationship between fantasy and behavior are concerned. A nonsignificant correlation results between combined impulse-inhibition value and intercourse ($r=.13$). When the socio-economic factor is partialled out, a slightly lower correlation results ($r=.05$). A non-significant correlation also exists between intercourse and total aggressive fantasy ($r=-.13$). The effect of partialling out social status is to reduce this ($r=-.05$). The similarity in the results of the above two operations is attributable to the fact that among measures of impulse (sex, orality, aggression) only aggression relates to a significant degree with Total Inhibition ($r=.48$, $p<.01$). When Total Aggression and Total Aggression Restraint are combined and correlated with intercourse, the result is statistically nonsignificant.

It appears, thus, that while SES is associated with the extent to which aggressive thematic fantasy appears in conjunction with inhibitory thematic fantasy (guilt), it is less important when one is considering the relationship between overt sexual behavior (intercourse) and thematic fantasy. Much of the relationship between impulse and inhibition is taken up by aggressive impulse rather than by impulses involving sex and orality. It appears also that the positive relationship between SES and Negative Associations to Sex reflects the relationship between SES and aggression. Kalin (1964) indicates that negative associations to sex can be confounded with other measures of aggression and that sometimes there is a thin line between these measures in terms of the reality they reflect. In a general way, this supports the findings

of Barclay and Haber (1965) who found a strong relationship between the appearance of sexual and aggressive imagery in TAT fantasy.

The Relationship between Overt Sexual Behavior and the Degree of Belief in the Connection between Sexual and Social Intimacy

It seems like a reasonable assumption that an individual's attitude toward the expression of sexuality should relate to what he permits himself in reality. The present data indicate that this is the case. For males, negative relationships exist between Degree of Belief and the following questionnaire variables: Frequency of Necking ($r = -.38$, $p < .01$), Frequency of Petting ($r = -.27$, $p < .05$) and Frequency of Intercourse ($r = -.22$). In addition, subject report of Dating Frequency in the previous year relates negatively to Degree of Belief ($r = -.36$, $p < .01$).

An interesting finding is that the absolute strength of the relationship is inversely related with the intensity of the sexual experience. Thus the negative relationship between Degree of Belief and Intercourse is not statistically significant. One explanation for this might be in the following form: if an individual has admitted, on a prior questionnaire, that he or she has had intercourse it would presumably be harder to "make a firm stand" or insist that long term relationships (marriage) exist before sex can occur. In an indirect way, this is in accord with the findings of Kinsey, et al. (1948) that females who had had frequent sex relations prior to marriage indicated less guilt than those females who had had sex relations a limited number of times and then stopped. Thus it would seem that actual sex behavior may influence the future expressions of an evaluative nature toward that behavior i.e., "moral judgments." For less intense forms

of behavior, the dissonance created by the discrepancy between moral judgments and actual behavior could presumably be less intense and so the attitude expressed would need undergo less modification. Thus the strength of the relationship could be seen as being inversely related to the intensity of the class of sexual behavior.

Intercorrelations Among Measures of TAT Fantasy for Females

Table 12 presents the interrelationships among measures of fantasy sex, aggression and inhibition for females. The number of correlations significant at the 5 percent level of confidence exceeds what would be expected by chance. Of the total 325 correlations, 59 (18%) are significant; 15 (5%) are significant at the 5 percent level and 44 (14%) are significant at the one percent level. Table 13 lists all of the significant intercorrelations and allows for a clearer view of what is going on in the matrix.

With respect to the four classes of fantasy (sex, aggression, ingestion and inhibition), the following general relationships hold. Sex and sexual inhibition relate positively illustrating again the simultaneous appearance within subjects of both expressive and restraining imagery. One orality theme (Ingestion of Solid) relates positively to sexual imagery. The correlation between Ingestion of Solid and Non-Physical Sex Imagery is significant at the 1 percent level ($r=.39$).

Aggression and sexual inhibition relate positively. Physical Aggression relates positively to Impersonal Negative Aftermath and Negative Association to Sex at the one percent level. Non-Physical Aggression relates at the one percent level to both Interpersonal Block

TABLE 12

Inter-relationships among Measures of TAT
Fantasy with Means and Standard
Deviations for Females

Item No.	Item	Mean	SD	1	2	3	4
1	Physical Sex Consummation	1.42	2.04				
2	Physical Sex Deprivation	.28	.90	49**			
3	Non-Physical Sex Consummation	8.23	5.54	18	26*		
4	Non-Physical Sex Deprivation	1.36	1.43	22	-05	02	
5	Personal Negative Aftermath	.08	.40	23	40**	03	-01
6	Impersonal Negative Aftermath	.16	.47	36**	05	02	26*
7	Avoidance	1.77	1.72	-12	-14	18	-14
8	Negative Associations to Sex	.36	.80	34**	16	06	23*
9	Physical Aggression	.58	1.90	19	-05	07	14
10	Non-Physical Aggression	2.34	2.31	06	13	19	-10
11	Personal Block	.36	.85	38**	43**	18	20
12	Interpersonal Block	.62	1.44	-11	-01	16	-01
13	Time Concern	1.66	1.83	-11	-13	-02	-04
14	Fear	1.16	1.91	-17	-17	-20	02
15	Ingestion Solid	.07	.34	-06	-06	39**	-13
16	Ingestion Liquid ^f	.00	.00				
17	Total Ingestion	.04	.26	-11	-05	24*	-15
18	Total Food	.31	.84	-05	-08	-05	-14
19	Total Sex	11.30	6.90	55**	47**	89**	28*

Item

20 To

21 To

22 To

23 T

24 T

25 C

26 C

TABLE 12--Continued

Item No.	Item	Mean	SD	1	2	3	4
20	Total Physical Sex	1.70	2.61	95**	73**	23	16
21	Total Sex Restraints	5.11	3.83	18	08	25*	11
22	Total Aggression	2.92	3.20	16	-02	18	01
23	Total Aggression Restraints	.54	1.02	15	-15	10	25*
24	Total Inhibition	14.01	6.91	15	04	24*	-01
25	Oral Need	.08	.00	01	-07	24*	-10
26	Oral Negative Aftermath ²	.00	.00				

Item

6 Impe

7 Avol

8 Neg

9 Phys

10 Non

11 Per

12 Int

13 Tim

14 Fea

15 Ing

16 Ing

17 Tot

18 Tot

19 Tot

TABLE 12--Continued

Item No.	Item	5	6	7	8	9	10
6	Impersonal Negative Aftermath	-07					
7	Avoidance	-09	00				
8	Negative Associations to Sex	-01	20	-13			
9	Physical Aggression	-06	40**	-12	34**		
10	Non-Physical Aggression	-06	14	35**	01	15	
11	Personal Block	-01	-05	-19	54**	22	-14
12	Interpersonal Block	-09	-01	34**	04	02	56**
13	Time Concern	-15	-06	00	10	17	-02
14	Fear	13	-06	09	-16	-03	-12
15	Ingestion Solid	-04	-07	05	-09	-06	01
16	Ingestion Liquid						
17	Total Ingestion	-03	-06	05	-07	-05	02
18	Total Food	-08	-13	-13	-01	04	-09
19	Total Sex	14	17	07	22	13	15

TABLE 12--Continued

Item No.	Item	5	6	7	8	9	10
20	Total Physical Sex	32**	26*	14	32**	13	05
21	Total Sex Restraints	-08	20	58**	38**	17	49**
22	Total Aggression	-08	34**	18	20	70**	81**
23	Total Aggression Restraints	-04	30	02	04	59**	31**
24	Total Inhibition	-04	16	45**	08	14	37**
25	Oral Need	-04	-07	-05	-09	-06	-06
26	Oral Negative Aftermath*						

Item

12 Int

13 Tif

14 Fe

15 In

16 In

17 To

18 T

19 T

TABLE 12--Continued

Item No.	Item	11	12	13	14	15	16
12	Interpersonal Block	56**	-14				
13	Time Concern	-02	04	-07			
14	Fear	-12	-01	-02	17		
15	Ingestion Solid	01	-09	-09	12	-04	
16	Ingestion Liquid						
17	Total Ingestion	-07	-07	09	-10	74**	
18	Total Food	-03	-05	05	-15	26*	
19	Total Sex	36**	10	-07	-23*	26*	

TABLE 12--Continued

Item No.	Item	11	12	13	14	15	16
20	Total Physical Sex	45**	-09	-13	-19	-07	
21	Total Sex Restraints	24*	60**	-08	00	-07	
22	Total Aggression	03	41**	-08	-10	-03	
23	Total Aggression Restraints	-09	07	08	02	05	
24	Total Inhibition	09	49**	49	18	03	
25	Oral Need	-09	-09	08	02	05	
26	Oral Negative Aftermath ^x						

Item

18 Tot

19 Tot

TABLE 12--Continued

Item No.	Item	17	18	19	20	21	22
18	Total Food	38**					
19	Total Sex	12	09				

Item 1

20 Tot.

21 Tot.

22 Tot.

23 Tot.

24 Tot.

25 Or.

26 Or.

TABLE 12--Continued

Item No.	Item	17	18	19	20	21	22
20	Total Physical Sex	-10	-07	60**			
21	Total Sex Restraints	-06	-18	28*	16		
22	Total Aggression	-01	-04	19	12	46**	
23	Total Aggression Restraints	-08	-09	14	07	18	58**
24	Total Inhibition	00	-18	24*	13	60**	35**
25	Oral Need	50**	58**	16	-03	-13	-08
26	Oral Negative Aftermath						

TABLE 12--Continued

Item No.	Item	23	24	25	26
1	Physical Sex Consummation				
2	Physical Sex Deprivation				
3	Non-Physical Sex Consummation				
4	Non-Physical Sex Deprivation				
5	Personal Negative Aftermath				
6	Impersonal Negative Aftermath				
7	Avoidance				
8	Negative Associations to Sex				
9	Physical Aggression				
10	Non-Physical Aggression				
11	Personal Block				
12	Interpersonal Block				
13	Time Concern				
14	Fear				
15	Ingestion Solid				
16	Ingestion Liquid				
17	Total Ingestion				
18	Total Food				
19	Total Sex				

TABLE 12--Continued

Item No.	Item	23	24	25	26
20	Total Physical Sex				
21	Total Sex Restraints				
22	Total Aggression				
23	Total Aggression Restraints				
24	Total Inhibition	20			
25	Oral Need	03	-03		
26	Oral Negative Aftermath				

Note.--Correlations are based on N=74 for all variables. Decimals are omitted for correlations.

*p < .05

**p < .01

^aNo data on which to base correlation.

TABLE 13

**List of Significant Relationships for each
TAT Variable - Female Data**

Related Items	r	p
Physical Sex Consummation		
Positively related to:		
Physical Sex Deprivation	49	.01
Personal Block	38	.01
Impersonal Negative Aftermath	36	.01
Negative Associations to Sex	34	.01
Non-Physical Sex Consummation		
Positively related to:		
Ingestion Solid	39	.01
Physical Sex Deprivation	26	.05
Physical Sex Deprivation		
Positively related to:		
Physical Sex Consummation	49	.01
Personal Block	43	.01
Personal Negative Aftermath	40	.01
Non-Physical Sex Consummation	26	.05
Non-Physical Sex Deprivation		
Positively related to:		
Total Sex	41	.01
Impersonal Negative Aftermath	26	.05

TABLE 13--Continued

Related Items	r	p
Personal Block		
Positively related to:		
Negative Associations to Sex	54	01
Physical Sex Deprivation	49	01
Physical Sex Consummation	38	01
Interpersonal Block		
Positively related to:		
Non-Physical Aggression	56	01
Avoidance	34	01
Avoidance		
Positively related to:		
Non-Physical Aggression	56	01
Interpersonal Block	34	01
Impersonal Negative Aftermath		
Positively related to:		
Total Physical Sex	49	01
Total Sex	44	01
Physical Aggression	40	01
Aggression Restraint	30	01
Negative Associations to Sex		
Positively related to:		
Personal Block	54	01
Physical Sex Consummation	34	01
Physical Aggression	34	01
Total Physical Sex	32	01

TABLE 13--Continued

Related Items	r	p
Physical Aggression		
Positively related to:		
Aggression Restraints	59	01
Impersonal Negative Aftermath	40	01
Negative Associations to Sex	34	01
Non-Physical Aggression		
Positively related to:		
Interpersonal Block	56	01
Total Sex Restraints	49	01
Total Inhibition	37	01
Avoidance	35	01
Total Aggression Restraints		
Positively related to:		
Physical Aggression	59	01
Total Aggression	58	01
Non-Physical Aggression	31	01
Impersonal Negative Aftermath	30	05
Time Concern		
Positively related to:		
Total Inhibition	49	01
Ingestion Solid		
Positively related to:		
Oral Need	76	01
Non-Physical Sex Consummation	39	01
Total Sex	26	05
Total Food	26	05

TABLE 13--Continued

Related Items	r	p
Total Ingestion		
Positively related to:		
Ingestion Solid	74	01
Oral Need	50	01
Total Food	38	01
Total Food		
Positively related to:		
Oral Need	58	01
Total Physical Sex		
Positively related to:		
Physical Sex Consummation	95	01
Physical Sex Deprivation	73	01
Total Sex	60	01
Personal Block	45	01
Negative Associations to Sex	32	01
Personal Negative Aftermath	32	01
Total Sex Restraints		
Positively related to:		
Total Inhibition	60	01
Interpersonal Block	60	01
Avoidance	58	01
Non-Physical Aggression	49	01
Total Aggression	46	01
Negative Associations to Sex	38	01

TABLE 13--Continued

Related Items	r	p
Total Sex		
Positively related to:		
Non-Physical Sex Consummation	89	.01
Physical Sex Consummation	55	.01
Physical Sex Deprivation	47	.01
Personal Block	36	.01
Ingestion Solid	26	.05
Total Inhibition	24	05
Negatively related to:		
Fear	-23	.05
Total Aggression		
Positively related to:		
Non-Physical Aggression	81	01
Physical Aggression	70	01
Total Aggression Restraints	58	01
Total Sex Restraints	46	01
Interpersonal Block	41	01
Total Inhibition	35	01
Impersonal Negative Aftermath	34	01

Note.--Decimals omitted.

and Avoidance. In addition, aggression and aggressive inhibition relate positively.

Thus, the overall relationships are consistent with the fantasy relationships explored up to this point. That is, given a normal population of subjects, the more thematic impulse that occurs, the more inhibitory imagery appears. This occurs for females as well as males.

Table 13 permits a more refined look at the specific clusters of variables. The first cluster involves the positive relationships between drive, consummatory imagery and inhibition. The interrelationship among drive and consummatory behavior in fantasy for females as well as males suggests that at this level of conceptualization, gender would not be a distinguishing factor, i.e., we could expect behavioral patterns to involve drive, appetitive and consummatory behavior, in sequence, across sexes. Personal Block, suggested as one of the most representative measures of inhibition, relates equally strongly with both Physical Sex Consummation and Physical Sex Deprivation. Thus guilt would appear to relate to both drive imagery ("wishing" or "wanting" as well as to imagery (goal satisfaction). One explanation, across sexes, might be offered in terms of a stimulus generalization gradient. Guilt associated with the overt expression of an act becomes generalized to other behavioral forms of committing the same act, i.e., "imagining" it and hence to motivational states involving the image to some degree i.e., "wanting" it. Presumably cultural sanctions against the specific form of impulse would remain fairly stable over time and thus serve as a continuous reinforcer for the connection between direct expression

and subtle forms of fulfillment in fantasy.

Another form of inhibitory imagery reflecting hostile attitudes (Negative Associations to Sex) relates also to Physical Sex Imagery. However, in the same cluster, the second type of inhibitory imagery discussed before (i.e., "retaliatory" imagery) appears in the form of Impersonal Negative Aftermath. Personal Negative Aftermath also relates to Total Physical Sex (consummation and deprivation imagery) at the 1 percent level. Thus within the same female, inhibition in both forms may be seen as appearing together with impulse expression. This suggests that the subjects experience a variety of sanctions and punishments associated with expression. There are two factors to consider. The first, as in the case with boys, involves the concept of response produced guilt, i.e., negative imagery is associated with the production of thematic stories involving impulse. The second factor concerns the differential restrictions placed on females vis a vis males with respect to the expression of sexuality - females are not expected to produce, publicly, with frankness equal to males, stories involving sex. As has been pointed out, Physical Sex imagery denotes direct expression of basic drive. It is reasonable to assume that given a relatively normal subject population with a balance of impulse and inhibition more intense forms of expressive imagery calls for more ubiquitous controls. The relative restrictions (notwithstanding a "sexual revolution") on the females sexual life may be reflected in the appearance of both forms of inhibition.

Two other small clusters involve aggression and inhibition. In the first, Physical Aggression is related to Impersonal Negative Aftermath

and Negative Associations to Sex. The relationship between Physical Aggression and Impersonal Negative Aftermath can in part be explained by the nature of the latter variable which often involves physical mishap. This may in turn involve physical violence between persons. Impersonal Negative Aftermath links this cluster to the first as does, indirectly, Physical Aggression. Aggression Restraints relate at the 1 percent level to both Physical and Non-Physical Aggression. It is possible that the appearance of clusters involving aggressive imagery and restraint among females, as opposed to males, reflects on an increase in female assertiveness in our culture (see McCary, 1967). The third cluster consists of three interrelated variables: Avoidance, Non-Physical Aggression and Interpersonal Block. These are all interrelated at the 1 percent level or better. This cluster is linked to the second by the appearance of Non-Physical Aggression. Like the other clusters, it demonstrates the link between aggression and sexual inhibition. A final cluster involves orality variables: Oral Needs, Ingestion of Solid, and Total Food. Ingestion of Solid links the cluster with Non-Physical Sex Consummation.

In short, three of the above clusters involve the association of expressive and restraining imagery, as in the case with males. One cluster involves sexual imagery and two are marked by aggressive imagery. This lends support to the interpretation of response-produced guilt in subjects. That is, the expression of direct impulse gratification in stories as well as the motivational states which presumably give rise to such imagery are associated within subjects with both inhibitory and retaliatory fantasy themes. This again suggests the "interpersonal"

nature of the "private world" of fantasy insofar as even here untrammelled expression of drive is not witnessed in normal subject population. The assumption here is that a degree of isomorphism exists between present imagery and the individual's experience with the moral training and interpersonal relationships of "significant others" in his environment, particularly in the developmental years.

Among females two general clusters appear. The second differs from the first by the emphasis on aggressive imagery and sexual inhibition, again illustrating a link up, here, among females, between assertiveness and sexuality. This emphasis on assertiveness may relate to the change in values over the last two generations concerning womens' rights to self-expression and independence. The aggression indicated ties in with considerations also concerning the confusion of sex roles.

Interrelationships Among Measures of Overt Sexual Behavior for Females

Table 14 presents the interrelationships among measures of overt sexual behavior for females. The number of correlations among these variables significant at the .05 level or better, exceeds what would be expected by chance. Of the 45 correlations, 3 (7%) are significant at the 5 percent level of confidence and 28 (62%) are significant at the 1 percent level. Considering the relationship between interview and questionnaire data, there are 24 possible correlations; of these 2 are significant at the 5 per cent level and 11 (46%) are significant at the 1 per cent level. Of 3 possible correlations involving only questionnaire variables 2 are significant at the .01 level. Considering interview codes alone, there are 21 possible correlations:

TABLE 14

**Inter-relationships Among Measures of Overt
Sexual Behavior With Means and Standard
Deviations for Female Data**

Item No.	Item	Mean	SD	1	2	3	4
1	Frequency Necking	48.96	61.95				
2	Frequency Petting	28.0	67.35	50**			
3	Frequency Intercourse	7.86	47.03	01	63**		
4	Dating Frequency	8.22	2.56	42**	27*	13	
5	Steady-Non-Steady Dating	7.81	3.31	39**	20	08	85**
6	Flirting Skill	5.47	1.73	59**	36**	05	55**
7	Verbal Sexual Exhibitionism	5.94	1.33	33**	12	-01	56**
8	Degree Belief in Social Intimacy	7.96	1.47	-26*	-20	-15	-21
9	Peak Heterosexual Experience	6.39	2.54	35**	33**	17	55**
10	Typical Heterosexual Experience	5.42	2.09	46**	34**	13	62**

TABLE 14--Continued

Item No.	Item	5	6	7	8	9	10
1	Frequency Necking						
2	Frequency Petting						
3	Frequency Intercourse						
4	Dating Frequency						
5	Steady-Non-Steady Dating						
6	Flirting Skill	41**					
7	Verbal Sexual Exhibitionism	41**	61**				
8	Degree Belief in Social Intimacy	-11	-23*	-31**			
9	Peak Heterosexual Experience	46**	45**	44**	-46**		
10	Typical Heterosexual Experience	54**	51**	45**	-46**		

Note.--Correlations are based on N=74 for all variables. Decimals are omitted. Variables 1-3 are from questionnaire data. Variables 4-10 are interview rating scales.

*p < .05

**p < .01

TABLE 15

Significant Relationships for each
Overt Sexual Behavior Variable - Female Data

	Size	Sig.
Total Frequency Necking		
Positively related to:		
Extent of Flirting Skill	59	.01
Total Frequency Petting	50	.01
<u>S</u> Report Typical Sex Behavior	46	.01
<u>S</u> Report Steady-Non-Steady Dating	39	.01
<u>S</u> Report Peak Heterosexual Experience	35	.01
Verbal Sexual Exhibitionism	33	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-26	.05
Total Frequency Petting		
Positively related to:		
Total Frequency Intercourse	67	.01
Total Frequency Necking	50	.01
Extent of Flirting Skill	36	.01
<u>S</u> Report Typical Sex Behavior	34	.01
<u>S</u> Report Hetero (Peak) Sex Experience	33	.01
<u>S</u> Report Dating Frequency Previous Year	27	.05
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-20	.10
Total Frequency Intercourse		
Positively related to:		
<u>S</u> Report Dating Frequency last Year		
Positively related to:		
<u>S</u> Report of Steady-Non-Steady Dating	85	.01
<u>S</u> Report of Typical Sex Behavior	62	.01
Verbal Sexual Exhibitionism	56	.01
Extent of Flirting Skill	55	.01
<u>S</u> Report of Hetero (Peak) Experience	55	.01
Negatively related to:		
Degree Belief in Sex-Social Intimacy	-21	.10

TABLE 15--Continued

	Size	Sig.
<u>S</u> Report of Steady-Non-Steady Dating		
Positively related to:		
<u>S</u> Report of Typical Sex Behavior	54	.01
<u>S</u> Report of Hetero (Peak) Experience	46	.01
Extent of Flirting Skill	41	.01
Verbal Sexual Exhibitionism	40	.01
Extent of Flirting Skill		
Positively related to:		
Verbal Sexual Exhibitionism	61	.01
<u>S</u> Report Typical Sex Behavior	51	.01
<u>S</u> Report Hetero (Peak) Behavior	45	.01
Negatively related to:		
Degree of Belief in Sex-Social Intimacy	-60	.01
Verbal Sexual Exhibitionism		
Positively related to:		
<u>S</u> Report Typical Sex Behavior	45	.01
<u>S</u> Report Hetero (Peak) Behavior	44	.01
Negatively related to:		
Degree of Belief in Sex-Social Intimacy	-31	.01
Degree of Belief in Sex-Social Intimacy		
Negatively related to:		
<u>S</u> Report Hetero (Peak) Experience	-46	.01
<u>S</u> Report Typical Sex Behavior	-46	.01
<u>S</u> Report Heterosexual (Peak) Experience		
Positively related to:		
<u>S</u> Report Typical Sex Behavior	83	.01

1 is significant at the .05 level and 18 (86%) are significant at the .01 level.

Considering the question of validity, i.e., the extent to which self-report questionnaire responses coincide with ratings of Overt Sexual Behavior by raters based on interview materials the point biserial correlation is used. Female subjects are classified as having had some vs. no experience with intercourse based on questionnaire report. This measure is correlated with "Peak" Heterosexual Behavior from the interview schedule. For females $r_{pb} = .68$ ($p < .01$) indicating, as for males, that those who admitted intercourse on the questionnaire did tend to get higher pooled scores by raters in terms of their "Peak" behavior. Approximately 8% of female subjects indicated experience with intercourse in the previous year and the median number of experiences was zero.

Table 15 lists all of the significant intercorrelations among these measures and allows for a clearer view of what is going on in the matrix. As can be seen these variables are highly interrelated. For example, frequency of necking relates at the 1 per cent level to all other variables except intercourse. Also, frequency of necking relates negatively at the 5 per cent level to the Degree of Belief in the Sex-Social intimacy connection. (see below for a further discussion of the variable Degree of Belief). The notable absence of significant relationships between intercourse as obtained from questionnaire and interview measures of overt sex behavior is in large part explainable by the low frequency of intercourse in the female sample. The size of the point-biserial r between intercourse and peak behavior suggests

that there is a substantial correspondence between raters judgments of female subjects' behavior and the subjects' own report.

Age is clearly a factor; the girls are not old enough to have experienced much in the way of intercourse. This interpretation is in accord with the findings of Kinsey, et al. (1948) whose data showed that "...3 per cent of the females of the total sample, irrespective of the age at which they had married, had had coital experience by fifteen years of age...20 per cent...between the ages of sixteen and twenty years..." (p. 288). The mean age of the present female sample is 16.5 years ($SD=.64$). The number of girls with intercourse experience in the sample (approximately 8%) fits quite well with the Kinsey findings.

The following relationships are obtained from an inspection of the intercorrelations involving questionnaire measures of Overt Sexual Behavior for females. The important variables are the frequencies of Necking, Petting and Intercourse. Necking relates positively ($r=.50$) with petting which was defined on the questionnaire as "making out" (see appendix). In turn, Petting relates positively with intercourse. This again suggests that necking is a very common pasttime and may have different social connotations than the more intense forms of sexual behavior, it may simply be "what people do" (on dates) and participation may reflect a certain amount of conformity behavior.

The relationships between interview variables and questionnaire measures are also strong. Dating frequency relates positively at the 1 per cent level to necking. The relationship between dating and petting

however is lower ($p < .05$) indicating, in accord with common sense, that all dating needn't involve intense sexual behavior. Steady dating relates significantly with necking ($p < .01$) and less strongly with petting (r is non-significant). This may indicate again that (1) steady-dating serves function other than sexual ones and (2) the "steady" relationship may not be as strong as the term steady implies. Thus, becoming involved in intense forms of sexual activity may serve a threat rather than being the *raison d'être* of the bond.

Flirting Skill relates at the 1 per cent level with both necking and petting. Flirting Skill is defined in terms of actual, active behavior and seems to involve two overlapping dimensions (see Appendix D): (1) the degree of formality-informality maintained in opposite sex encounters and (2) the degree to which those encounters can be said to be sexually toned. These two dimensions mark Flirting Skill as a possible general personality variable. Its high interrelationship with all other variables (except intercourse) suggests that it may be one of a class of general social skills that adolescents spend time polishing and refining.

Peak Sexual Behavior relates positively with both necking and petting at the .01 level. This is in accord with the low frequency of more intense forms of sexual behavior (i.e., intercourse).

With the exception of Degree of Belief (discussed below) all the interview variables were intercorrelated well below the 1 per cent level of confidence.

What conclusion can be drawn from the matrix? There is a high degree interrelationship among these behavioral measures. Within subjects,

the reports and ratings fall together and suggest most adolescents are behaving in much the same manner with respect to the types of behavior available to them. In brief most of the subjects date, kiss, many will pet and few will be involved, given the present age range, in intense heterosexual behavior. The state of being involved in a "steady" bond does not necessarily mean (contrary to what some mothers of adolescents seem to feel) that intercourse will result - or even heavy petting. Flirting Skill which reflects perhaps a general social ease (at moderate levels) is related to other forms of sexual behavior. All this seems in accord with common sense.

Two considerations should be kept in mind. (1) Again, there is some overlap among variables: where necking turns into petting may be hard to define as may also the precise difference between dating regularly and having a "steady." This in part explains the high interrelationship of these variables. (2) Much of what we are speaking of as "sexual behavior" is social behavior among opposite sexed persons. This is not to be confused with "mating behavior" (i.e. intense, exclusive, heterosexual bonds). Social conformity factors are operating and teenagers are notorious for looking to each other for behavioral standards. It is not surprising, therefore, to find in a "normal" population of youngsters a high degree of similarity in patterns of social behavior. Thus while we are dealing with measures of sexual behavior it should also be kept in mind that sexual behavior (aside from its procreative functions) is social behavior and will be subject to variables influencing other types of group behavior.

Interrelationships Among TAT Variables and Measures of Overt Sexual Behavior for Females

Table 16 presents the interrelationships among fantasy measures and overt sexual behavior for females. The number of correlations significant at the 5 per cent level only exceeds by a small amount what would be expected by chance. Of the total 260 correlations only 15 (7.5%) were significant. Correlation between TAT and questionnaire responses accounted for only 3 of these. In short, even for the girls there was very little in the way of significant findings. Therefore, the interpretations which follow are at best considered highly speculative. The size of the correlations are in keeping with the results of other developmental-fantasy studies, i.e., around .20 to .40. (Kagan and Moss, 1962; Skolnick, 1966). However, the data generally suggest that the relationships between measures of fantasy sex, fantasy aggression, fantasy inhibition and measures of reported overt sexual behavior are not strong ones, using as criteria the number of significant correlations as well as their size. The factors of: (1) low mean age, (2) the relative normality in the distribution of expressive and restraining imagery and (3) theoretical-conceptual inequivalence of fantasy and behavioral variables has been discussed with respect to male data.

The following relationships are obtained from an inspection of the intercorrelations among these measures. Of the questionnaire variables, Necking relates negatively to Non-Physical Sex Deprivation. This finding seems logical insofar as this fantasy variable reflects "wanting" and may be seen as a measure of affiliation need as well as a sexual one, particularly among females. Necking is a common form of

TABLE 16**Inter-relationships Among TAT Variables and Measures
of Overt Sexual Behavior for Females**

Item	Necking	Petting	Intercourse
Physical Sex Consummation	-07	-05	-09
Physical Sex Deprivation	18	-06	-05
Non-Physical Sex Consummation	20	-02	-08
Non-Physical Sex Deprivation	-27*	-06	12
Personal Negative Aftermath	03	-08	-03
Impersonal Negative Aftermath	-15	02	-05
Avoidance	15	-07	-06
Negative Associations to Sex	-11	-06	-06
Physical Aggression	-04	09	-05
Non-Physical Aggression	25*	20	10
Personal Block	-11	-14	-06
Interpersonal Block	21	14	18
Time Concern	-29*	-07	07
Fear	01	-12	-02
Ingestion Solid	02	-05	-03
Ingestion Liquid			
Total Ingestion	10	-02	-02
Total Food	19	12	-05
Total Sex	11	-06	-07
Total Physical Sex	01	-06	-08

TABLE 16--Continued

Item	Necking	Petting	Intercourse
Total Sex Restraints	12	-07	-05
Total Aggression	16	20	05
Total Aggression Restraints	-07	03	-02
Total Inhibition	07	02	03
Oral Need	-09	-05	-03
Oral Negative Aftermath			

TABLE 16--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Physical Sex Consummation	-18	-09	08	-04
Physical Sex Deprivation	14	13	24*	22
Non-Physical Sex Consummation	14	10	23*	33**
Non-Physical Sex Deprivation	15	-23*	-05	01
Personal Negative Aftermath	01	-05	02	-04
Impersonal Negative Aftermath	-12	-12	01	10
Avoidance	-04	06	06	05
Negative Associations to Sex	-22	-19	-05	-02
Physical Aggression	-01	-02	-05	-02
Non-Physical Aggression	21	22	17	22
Personal Block	-17	-16	-08	06
Interpersonal Block	18	20	10	10
Time Concern				
Fear	11	12	03	-10
Ingestion Solid	14	14	-13	-05
Ingestion Liquid ^o				
Total Ingestion	11	09	-18	01
Total Food	-06	-01	01	04
Total Sex	05	03	23*	28*
Total Physical Sex	-10	-02	15	04
Total Sex Restraints	-03	02	05	14

TABLE 16--Continued

Item	Dating Frequency	Steady- Non-Steady	Flirt- ing	Exhibi- tionism
Total Aggression	15	14	10	22
Total Aggression Restraints	01	13	-08	-05
Total Inhibition	12	19	10	21
Oral Need	06	14	-18	-07
Oral Negative Aftermath ^a				

TABLE 16--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Physical Sex Consummation	12	-14	-13
Physical Sex Deprivation	03	-07	03
Non-Physical Sex Consummation	-16	19	11
Non-Physical Sex Deprivation	05	03	-05
Personal Negative Aftermath	19	-17	-14
Impersonal Negative Aftermath	-17	08	08
Avoidance	-21	21	06
Negative Associations to Sex	-05	08	-10
Physical Aggression	-12	07	-02
Non-Physical Aggression	-25*	30**	20
Personal Block	-02	-05	-05
Interpersonal Block	-10	22	17
Time Concern	08	-03	-16
Fear	12	14	18
Ingestion Solid	-08	-04	-04
Ingestion Liquid ^q			
Total Ingestion	-32**	-04	-02
Total Food	-12	00	-02
Total Sex	-08	10	04
Total Physical Sex	10	-14	-09
Total Sex Restraints	-18	-23*	06

TABLE 16--Continued

Item	Degree of Belief	Peak Hetero- sexual Experience	Typical Hetero- sexual Experience
Total Aggression	-25*	26*	13
Total Aggression Restraints	04	07	04
Total Inhibition	-07	17	03
Oral Need	12	-09	-12
Oral Negative Aftermath			

Note.--Correlations are based on N=74 for all variables. Decimals are omitted.

^aNo data on which to base correlation

*p < .05

**p < .01

adolescent activity and might be considered one aspect of the general need to be with peers and conform to peer group standards. The relationship between necking and dating is significant well below the 1 per cent level ($r=.50$). Time Concern, used as a measure of the concern over management of impulses and delay of gratification also relates negatively with necking. Thus both an index of drive (deprivation imagery) and a measure of anxiety related to potential or actual delay in need satisfaction relate negatively with the common form of adolescent social behavior.

Necking relates positively with Interpersonal Block ($r=.21$, $p < .05$) a measure of sex restraint involving people outside the main characters. This again reflects the "interpersonal" nature of "private" experience. Intercourse also relates positively with Interpersonal Block ($r=.28$, $p < .05$). This is consonant with the finding that, in fantasy, themes of inhibition may appear simultaneously with themes of impulse.

Both necking and petting relate positively with "Non-Physical Aggression" ($r=.26$, $p < .05$ for the former and for the latter $r=.30$, $p < .05$). This is an illustration of the link between generalized assertiveness and sexuality among females. Peak Heterosexual experience relates to the same degree ($r=.30$) with Non-Physical Aggression. This is consistent with the data concerning the female Ss distribution of sexual behavior: for most females, petting is the most intense form of behavior in which they have been involved.

A negative relationship appears ($p < .05$) between Non-Physical Sex Deprivation and the degree to which the female subject has been

or is currently involved in steady-dating. One explanation for this is in the following form: girls who are relatively high in n Aff may be so because of personality characteristics which prevent opportunities for steady dating with its attendant satisfactions. An inverse relationship between these two variables would follow. In Non-Physical Sex Deprivation is viewed as a measure of affiliation need, rather than one of a drive for sexual contact per se, then this relationship appears quite plausible since the "steady" aspect of steady dating satisfies a need for continued affiliation. The relationship between Non-Physical Sex Deprivation and Steady-non steady dating is consistent with the relationship between Necking and deprivation imagery if one considers that a high degree of n AFF reflects an inability to participate in the patterns of social behavior which permit others to find satisfaction.

Flirting Skill may be seen as a measure of the degree to which opposite-sex interactions involve a strictly sexual element (see Appendix C). As such it relates positively among females with Physical Sex Deprivation, ($r=.24$, $p < .05$) a measure which reflects drive for sexual contact per se. This appears to be a logical finding. For girls, Flirting Skill involves seductiveness, communicating the desire to "follow through," wearing diaphanous clothing and the like. Here, although the relationship is not strong, fantasy imagery and overt behavior appear to reflect each other.

In addition to relating positively with non-physical aggression, Peak heterosexual behavior relates positively with Total Aggression ($r=.26$, $p < .05$). This may lend indirect support to the findings of Barclay and Haber (1965) who demonstrated a "strong linkage...between

aggressive and sexual motivation", under arousal conditions. Supporting the positive correlations between Necking, Petting and Peak sexual behavior on the one hand and aggressive imagery on the other are equally strong negative relationships between aggressive imagery and the Degree of Belief in the necessary connection between social and sexual intimacy (see below). The latter might be viewed as a measure to which the individual adheres to traditional or conservative values relating to sexual behavior. In the case where these values are strong, aggressive imagery, both non-physical and total, decreases ($r = -.25$, $p .05$). A measure of "orality," (Total Ingestion) also relates negatively with Degree of Belief ($r = -.32$, $p .01$), as does primary process sensuality.

One interesting finding is that the relationships that did appear between fantasy and behavior did so among female subjects. This is consonant with the finding that among intercorrelations of fantasy measures, female data included twice as many correlations significant at the 1 per cent level or better, as did male data. This suggests that for females, vis a vis males there is a somewhat greater correspondence between different classes of imagery as well as between imagery and action. That is, among female subjects, those who projected more thematic sexual material tend to admit more sexual behavior whereas for males, the inclusion of sexual material in stories was independent of experience. The absence of a relationship for male subjects may be explained in part by a factor of social expectation; boys can brag and tell "dirty jokes" among friends, are expected to, regardless of actual occurrence, as a sign that they "know" what older men know and

are competent to enter the adult world. Presumably this behavior, if it does occur among females, would follow its occurrence in males.

Talk concerning male prowess as well as jokes which may disguise anxiety about females may become in the eyes of the adolescent simply the way men go about things whereas actual erotic behavior may be another matter entirely. A certain independence between the verbal expression of sexual and aggressive themes and actual behavior in these areas is thus implied for males even though the data show, along with earlier studies, that males initiate sexual activity earlier and experience more of it.

For females, the positive relationships of interest are between one measure of inhibition (Interpersonal Block) and both Necking ($r=.21$, $p<.05$) and Intercourse ($r=.28$, $p<.05$) as well as a measure of aggression (Non-Physical Aggression) and Necking ($r=.26$, $p<.05$) and Petting ($r=.30$, $p<.05$). One hypothesis concerns the female S who does experience the more intense forms of sexual behavior; she may be less stable than her more conservative counterpart and this instability is reflected in thematic stories. Thus, the variables of concern are neither thematic or actual sex per se, but difficulties in development which are manifested in these ways. To further examine this line of reasoning, 32 stories from 8 subjects were compared for the presence of "negative" imagery (i.e., indices of interpersonal conflict, direct reference to physical sex, death and personal loss). Four of the subjects had admitted on the questionnaire of having intercourse experience during the previous year. (In fact this was almost the total number of such subjects.) Four subjects had not indicated experience

with intercourse. Of the total sample of stories, 19 showed unequivocal "negative" thematic material. Twelve of these (63%) were accounted for by those subjects indicating intercourse experience. Seven (37%) were from subjects with no admitted experience. Thirteen stories from the sample involved positive or neutral material (i.e., showed no "negative" imagery). Nine of these stories (69%) were from subjects with no intercourse experience; 4 (31%) were from subjects with intercourse experience. The application of the Fisher exact test indicates that with the present N, the two groups (intercourse vs. non-intercourse) do not differ significantly with respect to the proportion of positive and negative themes ($p=.20$). If N were doubled, the differences in proportion would be significant at the 5 per cent level. A trend is clear.

Relationships Among Measures of Fantasy, Overt Behavior and Socio-economic Status for Females

Table 17 presents the relationships between thematic fantasy, behavior and social class. The failure to find many indications of a relationship between social status and measures of fantasy impulse and inhibition may reflect the findings of Kagan and Moss (1962) that for females, sexual behavior was "more independent" of SES and sex-typed interests and was "more often a function of the desire and opportunity to establish a love relationship with a man" (1962, p. 171). Social class plays a little part in modulating the interrelationships of fantasy and behavioral variables among females. As Kipling says, "...The colonel's lady and Judy O'Grady are sisters under their skins."

TABLE 17

Relationships Between Socio-Economic Status,
Measures of Overt Sexual Behavior and Fantasy for Females

Items	SES	
	r	p
Physical Sex Consummation	-03	
Physical Sex Deprivation	02	
Non-Physical Sex Consummation	00	
Non-Physical Sex Deprivation	-01	
Personal Block	24	05
Interpersonal Block	07	
Personal Negative Aftermath	-07	
Impersonal Negative Aftermath	-10	
Avoidance	-05	
Negative Associations to Sex	07	
Physical Aggression	02	
Non-Physical Aggression	-07	
Time Concern	18	
Fear	00	
Ingestion of Solid	03	
Ingestion of Liquid ^s		
Total Ingestion	17	
Total Food	20	10
Total Sex	01	
Total Physical Sex	14	

TABLE 17--Continued

Items	SES	
	r	p
Total Sex Restraints	02	
Total Aggression	-04	
Total Inhibition	19	10
Oral Need	10	
Oral Negative Aftermath ^a		
Total Aggression Restarint	-13	
Frequency of Intercourse	00	
Frequency of Necking	-01	
Frequency of Petting	-07	
Dating Frequency for Previous Year	05	
Steady-Non-Steady Dating	12	
Degree of Flirting Skill	-07	
Verbal Sexual Exhibitionism	02	
Degree of Belief in Social Intimacy	-22	10
Peak Heterosexual Behavior	06	
Typical Heterosexual Behavior	08	

Note.--"SES" has an inverse scale in which high social status is associated with a low score. The correlations presented represent the actual relationship between the two variables i.e., have the sign reversed. Decimals are omitted.

^aNo data on which to base correlation.

However, the problems remains to determine the various ways in which the sisters relate.

The variables of social status and Degree of Belief in the necessary connection between sexual and social intimacy are negatively related for females ($r = -.23$, $p < .10$). While the size of the correlation makes interpretation speculative, it is consonant with the relationship between Degree of Belief and a number of other measures (see below).

This suggests more conservative values may exist among the lower class females with respect to the expression of sexuality than exist in the middle and upper middle class females. The negative correlation indicates that higher class females consider lengthy social ties to be of less importance when considering sexual expression. This may reflect a growing liberalization, at least in expressed sex attitudes, among the higher classes who have greater exposure to education. It may also reflect positive attitudes, of higher class females, toward growing amounts of independence and opportunities for assertiveness. Another factor centers around the matter of unwanted pregnancies. The tendency for lower class girls to place sex in a context of more lengthy social or formal intimacy (marriage) may relate to the extent she would be left in the economic "lurch" if she were faced with an unwanted pregnancy. A girl from a family higher on the social scale might be less concerned: birth control, access to abortion and adequate pre-partum care are available to her. This "safety" may be reflected in attitude expression.

The Relationship between Overt Sexual Behavior and the Degree of Belief
in the Connection Between Sexual and Social Intimacy for Females

As in the case of males a relationship exists between attitudes toward the expression of sexuality and behavior in that sphere. For females, negative relationships exist between Degree of Belief and the following questionnaire variables: Frequency of Necking ($r = -.26$, $p .05$), Frequency of Petting ($r = -.20$, $p .10$) and Frequency of Intercourse (NS). Dating Frequency also relates negatively for females ($r = -.21$, $p .05$).

However, the pattern of relationships are similar to those for male, i.e., an inverse relationship exists between the absolute strength of the relationships and the intensity of the sexual experience. This is again, in accord with the Kinsey finding of a negative relationship between post-marital guilt and the total number of sexual experiences. Two explanations are considered. (1) It is possible that the more guilty females were that way prior to pre-marital sex relations and that these attitudes brought about a rapid discontinuance (or avoidance of more intense involvement) of the behavior. Presumably, Degree of Belief would associate strongly with religiosity with its sanctions against pre-marital sex. (2) An alternate interpretation is the dissonance reduction explanation. This says that behavior effects an attitude change to favor the behavior (i.e., admitting sexual intercourse on a questionnaire makes subsequent, stern "moral judgments" less probable). Future research of a longitudinal nature can help clarify this issue.

SUMMARY AND CONCLUSION

Fantasy Measures

The foregoing have demonstrated that significant interrelationships exist within the various content classes of fantasy used in the present study. For both males and females the numbers of significant correlations linking fantasy measures far exceeded chance expectations. Likewise, the clustering of variables for both sexes suggest that not only the relationships among fantasy and behavior are complex but the interrelationships among fantasy classes themselves involve much more than simple wish fulfillment with respect to the primary drives of sex and aggression. The complexity of the fantasy classes may depend on the population under study. The present data suggests that for both sexes, and a relatively "normal" (non-pathological) population, the expression of primary drives in fantasy involves the simultaneous appearance of inhibiting and restraining imagery. This in turn suggests support for the notion of "response-produced" guilt (Clark, 1952; Clark and Sensibar, 1955) wherein the impulsive fantasy action bring about counter-action and "punishment" based on the cultural standards surrounding the impulse. With respect to sexuality in particular, the negative imagery associated with impulse expression in fantasy appears to be rather "primitive" in its severity. It may involve not only feelings of guilt for gratifying impulses but imagery involving violent physical rebuke from external sources as well. On this dimension males

and females do not differ.

For both males and females, aggression and sexuality in fantasy appear to be linked by both the relationships between sex and Physical Aggression and those between sex and negatively toned evaluations concerning sexual activity. This lends support to the findings of Clark (1952) and Barclay and Haber (1965). Part of this relationship appears to involve the factor of punishment associated with gratification of impulses.

For both males and females, deprivation imagery is correlated with consummation imagery. This suggests the possibility that even in fantasy "wish fulfillment" is not without its cost: people fantasy not just "getting their wish" but the steps necessary for attainment in the reality world. Two factors may be operative here. The first is that motivation (drive imagery) may be pleasurable in and of itself and this involves some of the fantasy space. For a given individual, having sexual intercourse may not be the only pleasure; the tension associated with the drive state and certain instrumental steps necessary for goal attainment may be rewarding independently of consummation. The second factor concerns the theoretical notion of the nature of fantasy. The appearance of an association between the drive and consummation may be related to the appearance of inhibitory imagery with impulse imagery. Secondary processes (reality considerations, judgments, etc.) in a normal population operate in such a way that even in wish fulfillment certain criteria for "credibility" may need to be met by the person. It may be that in fantasy not only inhibitions are maintained but also an awareness of the instrumental steps attendant

on drive satisfaction in "reality." Presumably, on this level of conceptualization, the sexes would not differ - i.e., both become motivated in some behavioral sphere, some instrumental steps are involved and successful consummation may occur.

Some differentiation of males and females occurs with respect to the clustering of variables within sexes. Male subjects appeared to fall into two general groups. In both of these, inhibition and impulse appear simultaneously. However, in the first the impulse is of a more direct blatant character (physical sex) and the inhibition is also of a more severe nature, involving both guilt and punishment. In the second group this relationship appeared to be "toned down": non-physical sex imagery, possibly reflecting need affiliation, was associated with "true inhibition" (Avoidance and Personal Blocks). Females showed a similar clustering of variables. Physical sex and aggressive imagery were related. With some overlap, aggressive impulses and restraints on both sex and aggression appear in another cluster. In a third aggression imagery and inhibition were related.

Overt Sexual Behavior

The findings with respect to overt sexual behavior are in keeping with the data from Kinsey, et al., (1948). The three questionnaire variables form a definite continuum with the mild form of sexuality (necking) on one end and intercourse on the other. The mean frequencies of these classes of behavior are inversely related to intensity, as seems reasonable. Among males, the variability of frequency as measured by the standard deviation is also inversely related to the intensity of behavior, i.e., greater variability in frequency across subjects

is associated with the less intense forms of behavior. For females on the other hand, there is a much wider spread about the mean for each class of behavior. Thus the variability in frequency of intercourse for females is nearly double that of males. The same is true for petting. This suggests that females initiate overt behavior later and at wider differing rates than males. In addition the present finding suggests support for those of Kinsey et al., that there was greater variability in the rate of sexual behavior for females vis a vis males, the former showing more discontinuity in behavior. Examination of raw data indicates that a few females accounted for much of the total frequency of intercourse in the female sample. Neither dating frequency, steady dating nor flirting skill occur in significantly differing amounts between males and females.

With respect to intercorrelations among behavioral measures, both male and female matrices showed a relative homogeneity. That is all the measures were highly intercorrelated with the exception of the absence of significant correlations involving intercourse for females. This high rate of intercorrelation will be discussed further with respect to the relationship between fantasy and behavior. The absence of correlations involving intercourse for females has been discussed with respect to the low frequency of occurrence.

The Relationship between Fantasy and Behavior

The differences between males and females with respect to the relationship between fantasy and behavior was slight. The male matrix did not include enough significant correlations to reject a chance

hypothesis. The female matrix exceeded the chance level (5 per cent of the correlations significant) by only a small amount. Thus, the original hypotheses were not confirmed. The strongest relationships occurred between an attitude measure concerning sex (Degree of Belief) and other measures of sexual behavior. The reasons for this were partly related to fantasy and partly to the measure of sexual behavior used.

There are a number of relevant considerations. One is that results of global correlational studies cannot provide the precision shown by experiments in the laboratory (Clark, 1952; Clark & Sensibar, 1955; Epstein and Smith, 1957; Leiman & Epstein, 1961; Kalin, 1964). These studies are of two types. The first measured the level of thematic sex immediately following experimental arousal. The findings were of a negative relationship between MSC and arousal. The second type of study related attitudes toward sex objects and thematic sex in TAT stories to an outside index (frequency and rate of orgasm). The findings were of a positive relationship between thematic sex and rate. The present hypotheses were based on the latter studies (Leiman and Epstein, 1961).

The most important differences between the present study and the above lie in independent variables (external behavioral measure) and age. The first point is that the subjects used in the present study were too young (high school students) to have developed stable patterns of intense heterosexual intimacy. This is particularly true of the females. The above studies used college age students. In addition, no attempt was made to stimulate drive in the present study.

However, the sexual behaviors which were demonstrated to occur with regularity (i.e., necking and petting) were not related to fantasy variables. One explanation for this lack of relationship lies in the nature of the overt behavioral measures used. These forms of behavior - necking, petting, dating, going steady and flirting can be seen in two ways - as sexual behavior and as adolescent social behavior. Fantasy measures designed for primary drives and inhibition were correlated with frequencies of behavior which, while sexual, are socially determined. These determinants include peer group pressure, security and conformity. For example, dating frequency and steady dating can be seen as being influenced by such factors as personal attractiveness, need for affiliative security and status among one's peers. In short these behaviors reflect secondary (learned) drives rather than primary drives reflected in the fantasy measure. For another example, Flirting Skill may represent not only social intelligence (awareness of opposite sex responses) but may be influenced by factors of self-esteem as in the case of the seductive girl who compensates for feelings of personal inadequacy by being highly provocative. In addition flirting is a skill, implying a learned behavior pattern. An added difference between the present study and that of Leiman & Epstein concerns the nature of the criterion variables. While those of the present study involve socially learned behaviors, there is no reason to believe that Leiman & Epstein were obtaining more than an index of the frequency of masturbation in their sample. Had the present study involved a measure of orgasm frequency, then the findings of the former study might have been replicated.

The high intercorrelations among measure of overt sexual behavior indicate a relatively homogenous group of affiliative, socially validated and approved behaviors which are shared by members of the population under study. These behaviors did not distinguish, as in the case of fantasy variables, between individuals or sexes. In addition, the overt forms can be presumed to be learned in part at the time when the individual begins to practice them. The behavioral measures used here reflect not only moral codes of the common culture but standards appropriate to the adolescent period. These standards are, for the subject, presently salient and determined by other than primary drive considerations.

Results for fantasy measures present strong evidence for a complex picture of fantasy: it reflects both drives and behavior standards set by the culture. Also indicated is that for normal populations, thematic material will involve a co-occurrence of impulse and inhibition given neutral conditions for eliciting fantasy. In accord with Klinger (1969) it may be concluded that the fantasy world is not a totally private one; it is composed largely of problem-solving attempts on the part of the individual with respect to immediate, on-going reality. Some of that reality involves coping with primary drives and their derivatives in light of social skills and opportunities for expressing and inhibiting them, while another aspect involves coping with social roles, expectations and the like in light of the press of primary needs. During the adolescent period the establishment of stable patterns of sexuality and one's social role identity are very important. The importance of these tasks during this period suggests ample reason for a complexity in the fantasy life.

The behaviors used as independent variables, unlike the fantasies are subject to constant modification, consensual validation and the like. It is much harder for an individual to hide the fact that he or she is awkward in social situations than to hide a romantic fantasy. Social patterns may thus be molded, because they are exposed to conformity pressures. The fantasy world, is not as amenable to "molding" because for a variety of reasons, it is not constantly exposed.

The above points to both methodological and theoretical considerations. On a theoretical level, the relationships between primary processes (impulse) and secondary processes (inhibition, restraint, and reality considerations) in fantasy may not take the same forms as those relationships in the reality world where secondary processes must dominate. In reality, the secondary processes involve a multitude of complex interrelated instrumental, social behaviors. Two levels of conceptualization are implied and different social learning factors may be involved.

With respect to methodology, future research should concentrate not on global relationships between fantasy and behavior but relationships among fantasy classes appropriate to behavior classes, e.g., Physical Sex and frequency of orgasms. The present results do not indicate that there is no relationship between fantasy and behavior in terms of the primary drive. They do suggest the reason they are difficult to demonstrate in the present sample: behavioral measures of the "primary drives" are reflecting in large part social influences. In normal populations these influences tend to "homogenize" gross social behaviors. Likewise, in normal populations, primary drives in fantasy tend to be modulated and equalized by internalized restraints. The present study may have dealt

more with the relationship between primary drives and conformity (implying secondary drives of the need for approval) than with the relationship between the expression of primary drives in two behavioral spheres.

On the other hand, behavioral indices used in the study from which the present hypotheses were derived may reflect behavior that is not socially influenced, i.e., orgasm rate which in the sample used, probably involved masturbatory outlets. Had the present study involved such an index, the earlier findings might have been replicated.

Fantasy, Behavior and Socio-economic status.

Males and females differ in the extent to which socio-economic status is correlated with fantasy and behavioral measures. Among males, measures of aggression and inhibition in fantasy correlated positively with socio-economic status. This was not true for females. Likewise for males intercourse was negatively related to socio-economic status where as for females, no relationship was found. Social class appears to play little or no part, among females, in the interrelationships of fantasy and behavior. This may reflect the rhyme often heard at weddings: "A son's not a son when he takes him a wife/ But a daughter is a daughter for the rest of her life." The implication is that role relations effect males more than females - that is, the traditional female role (nurturance, obedience and childbearing) is more stable and not situationally determined. "Revolution" in sex roles notwithstanding, it would appear that the present finding represents a fact: as Freud pointed out, physiology is (at least in part) destiny. Whatever valuations are placed on the fact, it is a more fundamental destiny than those offered by social mobility.

The Relationship between Degree of Belief in the Necessary Connection Between Social and Sexual Intimacy

Males and females did not differ with respect to this variable.

Inverse relationships appeared between Degree of Belief and all questionnaire measures (frequency of necking, petting and intercourse) as well as dating. The hypothesis offered for this concerns the concept of cognitive dissonance (Festinger, 1957). In essence this formula reads that when a behavior is performed, subsequent attitudes concerning it change in favor of the behavior. Thus the admission of sexual behavior on a prior questionnaire would tend, for most subjects, to inhibit the insistence on continence with respect to sex. This is in indirect accord with the findings of Kinsey et al., (1948) who found a negative relationship between the amount of guilt women subjects experienced for premarital sex behavior and the actual amount of behavior which occurred.

Summary

This study dealt with the general area of the relationship between fantasy and behavior. Psychoanalysis postulated that fantasy permits a substitute discharge of socially disruptive drives. This generalization was questioned as empirical studies, utilizing projective devices, began to demonstrate a variety of relationships between different classes of thematic fantasy and behavioral measures. According to Atkinson, (1958) situational determinants are central to the issue of these relationships. Some empirical work has produced evidence for this notion. Lazarus (1966) concluded that the "direct expression" principle was incomplete and formulated a "substitutive-defensive" principle in an effort to tie together disparate findings.

Few of the available studies were concerned with the "primary-drives" of sex and aggression. Such that were showed disparate results as well as a variety of methodological differences which make comparison difficult. These experimental studies were of two general types. The first induced sex drive by experimental manipulation i.e., presented sexually stimulating material. The criterion was manifest thematic sex in TAT stories. A negative relationship resulted between drive level and the production of thematic sex. These results were explained as being due to an increase in defenses related to the increase in a socially "prohibited" need. Guilt was hypothesized to have resulted from the subjects' production of sexual images, i.e., the concept of response-produced guilt was supported.

In the second type of study, drive was ascertained from an "outside" measure: self-report of the rate and frequency of orgasm. The criteria were appealingness of sex object and thematic sex content in TAT stories. A positive relationship resulted between drives and thematic fantasy.

Using the latter studies as a source of hypotheses, the present study attempted to clarify the relationship between TAT fantasy and self-reported sexual behavior. Utilizing a sample of 150 high school juniors and seniors in an East coast community, measures were obtained of both TAT fantasy and self-reported sexual behavior. The subjects were administered an extensive questionnaire concerning "adolescent leisure time activities" which contained items relating to the frequency of necking, petting and intercourse during the previous year. During the questionnaire session, subjects were administered 4 TAT pictures,

and asked to write stories. Later, the subjects participated in a 3-4 hour, semi-structured interview which included questions concerning overt sexual behavior: dating, "steady dating," flirting and the extent of the subjects' sexual experience. Interviews were rated by male and female raters who did not know the subjects' demographic characteristics.

Fantasy variables coded for sex, aggression, orality and restraints were correlated with questionnaire and interview measures of overt sexual behavior. The results for fantasy measures alone indicated that a "fantasy world" is a complex one involving more than simply the direct expression of drives. For both sexes, impulse and inhibition were positively correlated lending support to the concept of response produced guilt in normal subject populations. In addition, sex and aggression themes showed a positive correlation suggesting support for related empirical work. Males, more clearly than females were distinguished by clusters of correlations involving physical as opposed to non-physical sex imagery. The type of inhibition fantasy associated with each were distinguished on the basis of their character: the more intense forms of imagery involved retaliatory (mishap) fantasy and the less intense forms involved "true inhibition" (avoidance of sexuality).

Among females, some differentiation occurred on the basis of aggressive imagery. That is, for some females aggression and inhibition were the main concern. It was hypothesized that the increase in females assertiveness was based on cultural changes over the last seventy years but that this change did not effect all females in a given setting equally.

Overt behavioral measures were highly intercorrelated for both males

and females suggesting a common network of social patterns in which the subjects participated. However, virtually no significant relationships appeared between fantasy measures and the overt behavioral measures. A number of explanations were considered. (1) Subjects were, in the main, too young to have established stable patterns of heterosexual intimacy. This interpretation was in agreement with other empirical findings. (2) In a normal subject population there is a co-occurrence of the expression of impulse and inhibition in fantasy. This means that no predominance of expressive or inhibiting fantasy appears to correlate with behavior. (3) Relationships were difficult to demonstrate because the measures used for fantasy involved a different conceptual level than those used for behavior. While fantasy measures involved "primary processes" and developmentally determined, "primitive prohibitions," the behavioral measures were influenced as well by secondary drive factors and social conditions, e.g., need for affiliation, and adolescent "conformity." It was suggested that future work involve more attention to defining the conceptual levels of fantasy and behavior.

In addition, there was evidence for a positive relationship among males between socio-economic status and the appearance of aggressive fantasy and inhibition. Females showed no such relationship. It was suggested that the female role, involving the fundamental processes of childbirth is more stable and less effected by situational determinants. A final finding was of a negative relationship between attitudes concerning social intimacy and sexual behavior for males and females. A cognitive-dissonance-reduction explanation was offered.

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APPENDIX A

Pictures Used for TAT Stories

NAME _____

(Please Print)

Instructions for Storytelling

On the following pages you are to write out some brief stories that you make up on your own. There are no right or wrong answers. This is designed to give you an opportunity to be as fanciful as you wish, to imagine a situation quickly and write out a brief story about it.

In order to help you get started, there are a series of pictures that you can look at and build your stories around. When you have finished reading these instructions, you should look at the first picture briefly, then turn the page again and write a story suggested by the picture.

To help you cover all the elements of a story plot in the time allowed, you will find four questions spaced out over the page. They are:

1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?

Your overall time for each story is about five minutes. There is no strict time limit, but don't write much over five minutes. I'll announce when five minutes are up.



Just look at the picture briefly (10-15 seconds), turn the page and see the strange things.

Spend about 5 minutes on this story.

1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

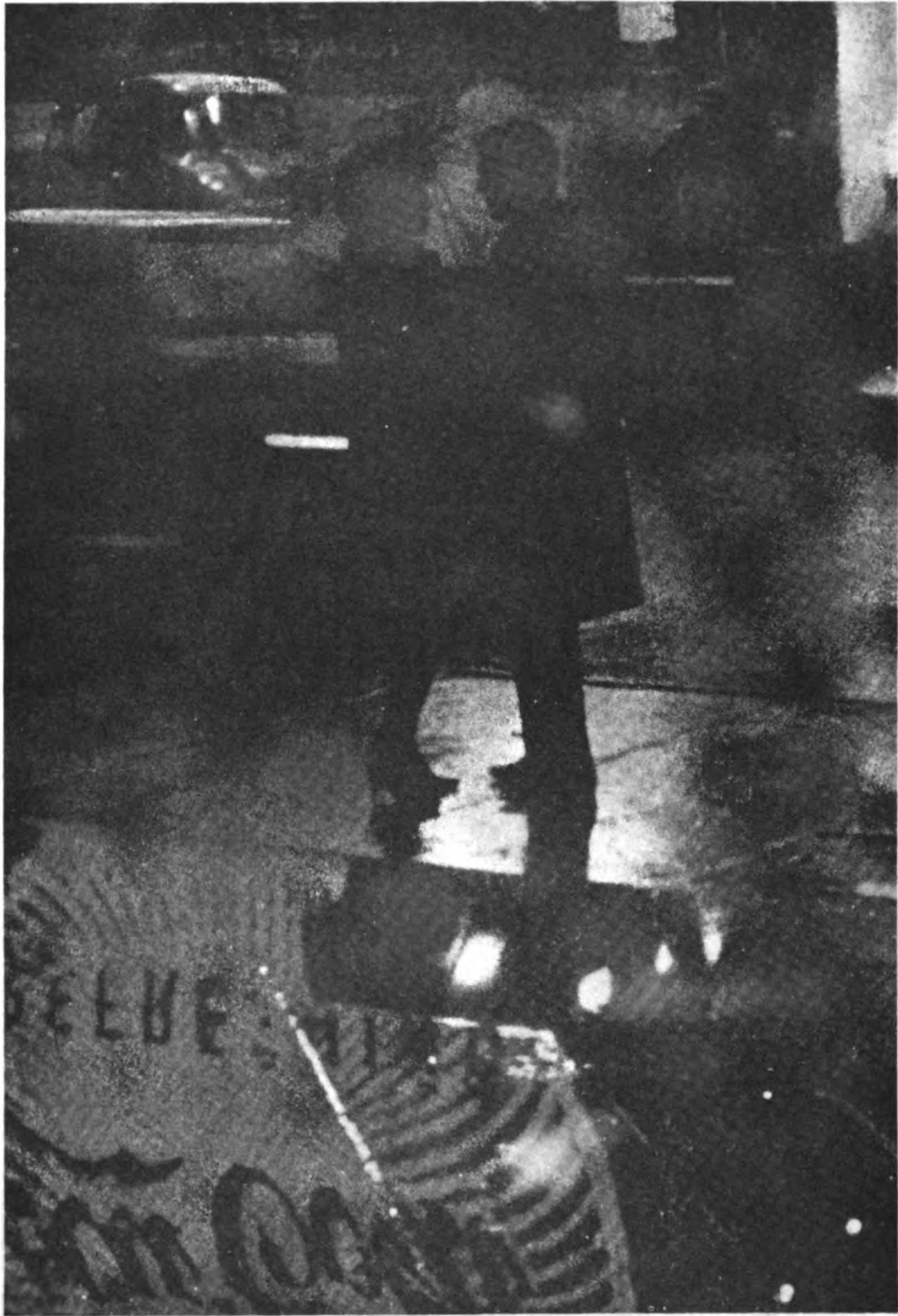
1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

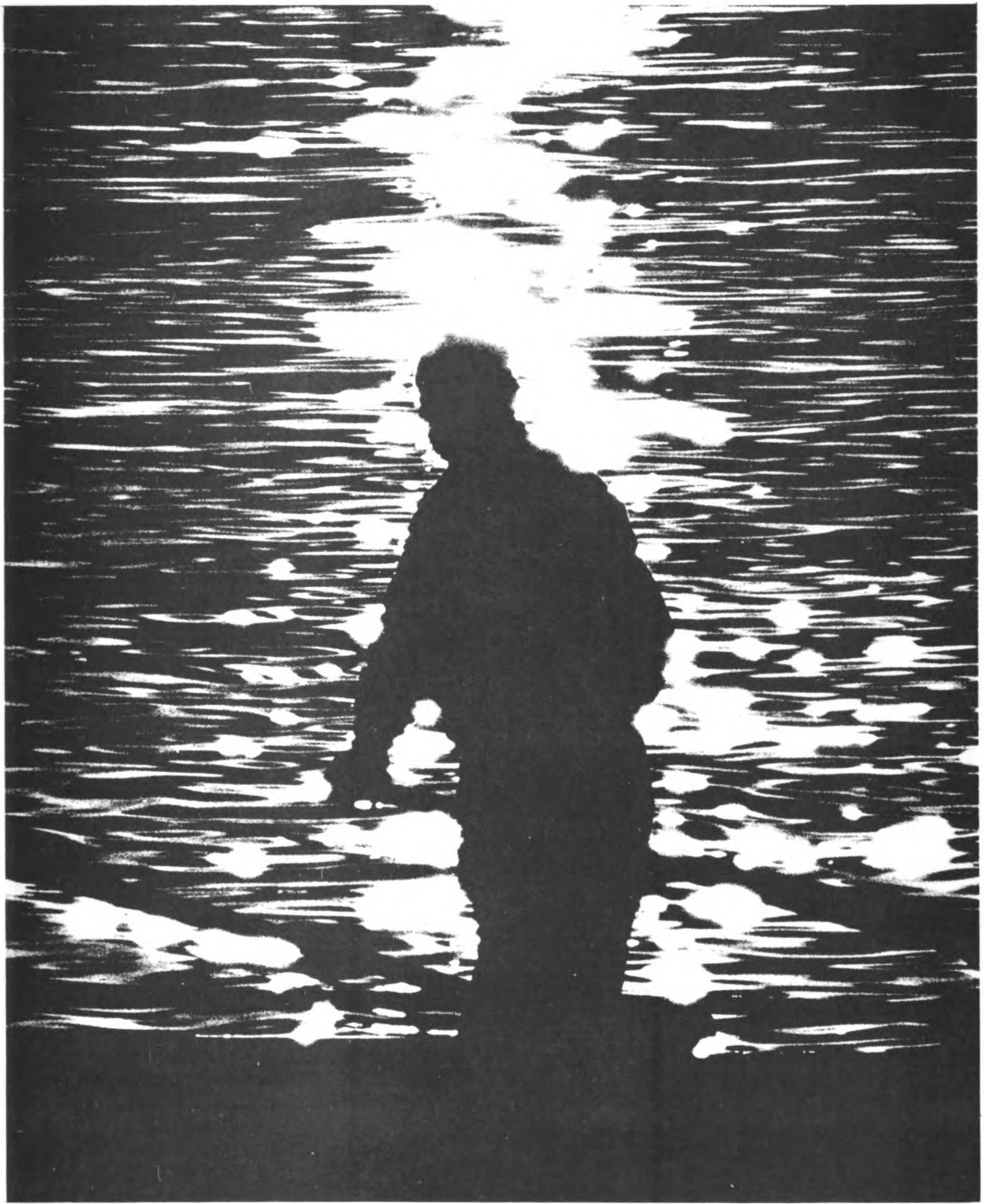
1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

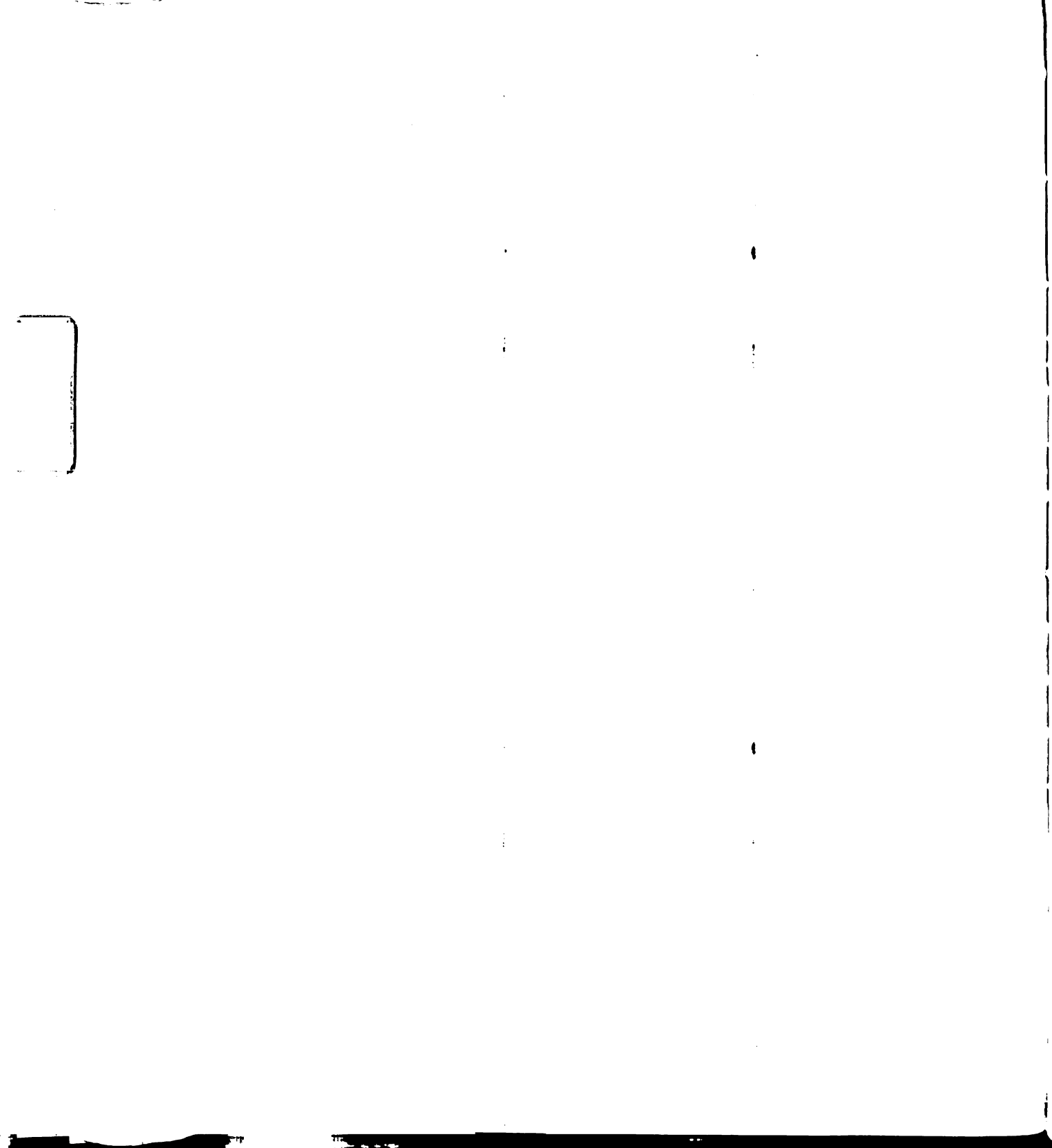
1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?





Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

1. What is happening? Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?



F

Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

Spend about 5 minutes on this story.

1. What is happening? Who are the people?

2. What has led up to this situation? That is, what has happened in the past?

3. What is being thought? What is wanted? By whom?

4. What will happen? What will be done?

]

APPENDIX B

TAT Scoring Scheme (R. Kälin)¹

1. SEX

Each phrase or sentence referring to sex, love, or romance is scored. This includes not only references to a relationship between a man and a woman but also to physical attributes with clear sexual or romantic connotations, e.g., "what a gorgeous blonde," "a handsome man." In order for a phrase or sentence to be scored for sex at all there has to be more than mere presence of boy and girl, or boy and girl doing something together. That is, it has to be clear that a romantic or sexual relationship is involved. Thus do not score, "she speaks to him," "they go away together," "they study together." Such phrases are scored when they are modified by words that clearly have sexual or romantic connotations, e.g., "they are on a study-date," "they eloped together." Each such reference is classified as physical or nonphysical.

a. Physical: Any sexual image that has a body reference in it. A "body reference" is indicated by

(i) mention of physical characteristic, as in mentioning a part of the body, or some aspect of the person that can be seen

e.g., "gorgeous blonde"
"beautiful knees"
"nice body"

(ii) sensations, perceptual activities, as when a character in the story is engaged in perceiving, or sensing the other and this is explicitly stated.

e.g., "she couldn't take her eyes off him"
"he smelled her perfume"

(iii) physical relationship, as in body contact between two lovers. A person may be thinking about a physical relationship.

e.g., "kissing"
"mentally takes her to bed"
"intercourse"

Intercourse is inferred from mention of pregnancy.

(iv) physical emotional state, explicitly described

e.g., "he is tingling with anticipation--over meeting her"

Do not include emotional words that are used routinely.

Do not score: "he loves her"
"he is in love"
"her love"

unless these words are modified.

Do score: "he is sick with love"
"he loves madly"

(v) emotional state in author,

e.g., "Suzie you look good" or as "editorial comment"
"nice looking girl"

Notes:

1. General (as opposed to specific references) do not get scored physical. Score as nonphysical:

"They are having an affair."
"He wants to seduce her."

In order for a statement to be scored physical, there has to be a concrete physical reference, not just an implication to something physical.

2. Rape is scored physical sex only when it clearly involves pleasure. When no pleasure is involved score physical aggression.

b. Nonphysical: All references to romance which are not classified as physical

e.g., "he asks her for a date"
"they are interested in each other"

Also, score here all expressions suggesting physical sex that are routinely used

e.g., "love"
"a girlie show" or
"a strip show"
"a whore"

However, when there is interest in "strip show" or "strip show" is modified, eg., a "wild strip show" it is scored physical.

Not scored altogether are mere identity characteristics

Do not score "a couple"

The fact that people are married, as when people are identified as being married is not scored. Do score if two people want to get married. Score also if marriage is modified, e.g., "happily married."

In addition to classifying each reference as physical or nonphysical each such reference is also classified as consummation imagery or deprivation imagery. Doing this, the physical nonphysical distinction is also maintained.

aa. Consummation Imagery: References that are not clearly deprivation imagery. Actions, thoughts referring to sex or romance. Most of the examples given above would be classified as consummatory imagery.

bb. Deprivation Imagery: Explicit statements of wanting or wishing something sexual or romantic. Mention of deprivation and frustration. This category is a "stricter" one than consummatory imagery. It has to be clearly stated that something sexual is wanted. Anything that involves action (even if it is mental action) or sensory consummation is scored consummatory imagery.

e.g., Physical Deprivation Imagery

"He is horny."
 "John wants to have intercourse."
 "Oh boy, does he ever want it."
 "He wants her ass."
 "He wants sex."
 "He desires her body."
 "Man wants to get in the strip show."
 "He wants to go to bed with the pretty secretary."
 "This guy is hot for her body."
 "While an oversexed dog walks by"

Nonphysical Deprivation Imagery

"They were overcome with desire."
 "Desires female companionship."
 "They want to get married."
 "Both desire someone to love."
 "He is hoping to get his thrills in the office."
 "He is a little horny."
 "He wants a woman."
 "She is wanted by him."
 "Hans needs a woman."
 "The girl in reality wants to go with the hoodlum for a thrill."

"The secretary would like to date him."
 "He wishes he had a wife with similar characteristics as the girl in the show."
 "A party is going on and Lloyd hasn't got a date."

c. Sex Restraint: A sex restraint is any phrase or sentence that involves an "avoidance" reaction to sex or romance. Avoidance reactions are statements with negative connotations with regard to sex or romance. Anything that interferes with the successful pursuit of a sexual or romantic relationship. Restraints are divided into the following categories:

(i) personal blocks: fears, doubts, worries, hesitation, embarrassment about impending sex or romance. It does not matter whether these competing thoughts are attributed to the male or the female in the relationship. However, in order to differentiate this category from the following one (impersonal blocks, ii), these competing thoughts have to be attributed to one of the main characters in the story.

e.g., "He is wondering whether to run up the tunnel after her."
 "She is not willing to take the first step towards him."
 "He is a bashful man."
 "Their blushing glances"
 "John finally has the nerve to ask her."
 "What do you mean you won't go to bed with me?"
 "She is afraid that when he returns things will be different."
 "She has pushed the idea and now she is worrying."
 "Her fears are well founded."
 "They are discussing the morality of pre-marital sex."
 "Gertrude is fighting against a background of prudishness."
 "She convinces him that marriage should come first."
 "She is faced with a decision (of making a play for him)."

(ii) impersonal blocks: things outside the main characters interfering with impending sex or romance. Blocking by environment, nonhuman agents, restraint by human agents outside the main characters, (police, the boss, the system) physical mishaps, accidents.

It should be noted that whenever one of the main characters explicitly thinks, or worries about an impersonal block it gets scored as

personal. Thus if it says, "He is worried about the boss' reaction if he should take her to bed," it should be scored a personal block. However, the statement, "Just as he is about to make advances toward the girl, his boss calls him on the phone," should be scored impersonal block.

e.g., (He is pursuing her) "The tunnel will be closed," (preventing him from finding her).
 (He makes his secretary) "with his wife's and son's picture watching him."
 "He trips, falls into the water and drowns."

(iii) avoidance, egression, refusal: statements indicating avoidance and refusal by one of the main characters. Wanting to get away, getting away.

Avoidance is frequently characterized by an abrupt termination or cessation of a sexual or romantic relationship. This abruptness can be indicated by the action of a character (e.g., "He suddenly leaves," or by the way the story is written by the author). e.g., "Nothing will happen." "His secretary would like to date him, but cannot."

e.g., "He dismisses Gloria for the day, right in the middle of a letter and rushes home."
 "She will jump up and the sudden movement will overturn his precariously balanced chair."
 "She will leave."
 "Nothing will happen." (This indicates avoidance by the author.)
 "She refuses."
 "The girl finally tells her date that she does not want him to accompany her any longer."
 "He drops her."

(iv) personal negative aftermath: guilt, regret, fears, worries negative reactions following sex. As in (i), statements in this category are attributed to one of the main characters.

e.g., "She now wishes she hadn't (put out)."
 "The girl is shocked."
 "He wants to get back and apologize."
 "He feels remorseful."

(v) impersonal negative aftermath: external interference after sex. Accidents, mishaps, punishment by impersonal sources.

e.g., (After watching the girlie show) "He will be thrown out by the clown."

"A speeding bus will slide and knock each into the post in the foreground."

"They will be crippled."

(They will indulge themselves.) "His wife will be killed in an accident."

"She will be run over by an engine."

"He will be knifed by a sex fiend."

(vi) negatively evaluative associations about sex: general statements not related to any specific sexual action but associated with sex or romance in general. Discontent, nagging, negative affect connected with sex, disillusionment, cynicism, pessimistic statements, macabre things connected with sex.

"But she is screwed up."

"Her parents are divorced."

"The problem is that she needs security and she will never have it."

"(She loves) some lousy proletarian."

"The executive is unhappily married."

"His wife is ugly."

"Wife is sexually frigid."

"He has made unsuccessful advances before."

"The bearded lady."

"He has had trouble with his wife."

"He wasted a night."

"He wants to get rid of the troublesome marriage situation."

"(Then he grabs her) only to discover that she is his sister."

"But he hasn't got a chance in the long run."

"They think they are in love but they are not."

2. AGGRESSION

Each phrase or sentence referring to human (or animal) aggressive thought, emotion, or action is scored. The key indicator is not the effect of such action, e.g., injury to an organism, but the character of the action itself. Thus simple references to injuries or the effects of aggressive action are not scored, (however see (3) below). The criteria for scoring aggressive imagery are:

1) There has to be hostility, i.e., the aggressive act or thought has to be an end in itself. "A punch in the nose," when this is part of a boxing match and nobody is angry is not scored as aggression. Violent personal action which could be nonaggressive in intent is also not scored. E.G., "he is trying to cut the other driver off," is not scored unless aggressive intent is clear. In the boxer and racing story an explicit statement about hostile emotions is normally required to score aggression. However, hostile intent can be inferred when interpersonal actions are "rougher" than necessary, e.g., (in boxing story) "he gives out punishment."

2) The aggressive image has to involve at least one animate organism, either as instigator or as recipient of aggression. Inanimate violence is not scored. E.g., "the limb is torn off the tree" is not scored. Do score however

"he kicked a beer can"
 "he was smashed up"
 "the lion devoured him"

3) The aggressive image has to refer to an act not merely the result of an act. E.g., "a cripple," "a broken ankle," "his father died in an accident" is not scored. However, if the injury results from specified violent action it is scored.

Score: "the drive is smashed up"
 "there will be a fight and he will draw blood"

In this latter example it is clear that there was violent physical action although the action is not specifically described. Score: physical aggression.

Other conventions:

1) When two sentences are needed to score one image, score one, not two. That is, when one phrase or sentence contains violent action and another reveals hostility, one image is scored and not two.

e.g., "he cut the other driver off"..
 "this aggressive behavior"= 1 aggressive image.

2) Aggressive words must be stated, not inferred.

3) Denial is scored, because the idea is mentioned even though the act may not occur, e.g., "not any blows."

Each aggressive image is classified as physical or non-physical.

a. Physical: Any aggressive image that has a physical (as opposed to a verbal or psychic) reference in it. "Physicality" is scored for the following:

(i) physical emotional state. Emotion words are only scored physical when they are modified. Do not score as physical: "he is mad," "angry," "furious," "swears," "hates," (these are scored nonphysical aggression). But score physical:

"he burns with hate."

"his face is red of anger"

Do not score aggression at all for routine or casual use of such words that signify hostile emotion, e.g., "Oh, Lewis, I hate walking here," or emotional words that do not clearly signify anger, e.g., "he is upset."

(ii) physical type of action. Score physical for an act between a subject and an object. A physical word or metaphor is not enough. Do not score "make a wisecrack," "criticize bitterly," (score these nonphysical). But do score:

hit
bite
slap
kick
take apart
murder
maim
strike
shove around
smash up

In general where there is physical contact score physical.

(iii) author (not character in story) shows hostile, emotional state. This is inferred by a certain use of slang words. Words like "punk", "hood," etc. are scored physical when they are used (1) in direct speech,

e.g., "you punk"

(2) when they are modified,

e.g., "a dirty punk"
"that punk"

Note: The modification has to "intensify" these words. Do not score: "the lounging hood"

(3) when they are clearly derogatory,

e.g., "nigger"

or have clearly emotional overtones,

e.g., "that Bastard"

Such slang words are not scored as aggression at all when they are used merely as identity characteristics. E.g., "a bum," "a punk," "a hood" is not scored.

Note: As in sex, general (as opposed to specific references) do not get scored physical. Score as non-physical:

"They are having a fight."

In order for a statement to be scored physical, there has to be a concrete physical reference not just an implication to something physical.

b. Nonphysical aggression: Any aggressive image not containing a clearly physical image, as specified above, is score nonphysical. Guilt is not scored here (though it might be considered self-aggression) because it is scored under "restraints."

Certain nouns and noun-modifiers that indicate potential aggression are scored nonphysical.

e.g., "a ferocious lion"
"a dangerous man"
"a tough environment"
"a brute"
"a race riot"

General examples of nonphysical aggression: insult, taunt, dominate, trouble, punish, have an argument, quarrel.

"There will be a fight and he will get hurt"
"He might have killed the driver"
"He is a fighter," (but not as identity in Boxing story)

"There will be violence"
 "Small fights will break out"

Note: The following table summarizes for sex and aggression how certain identifying characteristics get scored.

	not scored	nonphysical	physical
<u>Sex</u>	(identity characteristics) a couple	love girlie show strip show a whore	wild strip show
<u>Aggression</u>	a hood a bum a punk	a tough environment a brute dangerous man	you punk that punk dirty punk

c. Restraints: Score any interference (as defined in sex) with the aggressive impulse. Restraints may represent objective frustrations, subjective fears, conscious decisions not to pursue an aggressive impulse; score also: regret, guilt, or punishment for aggressive activities, or thoughts.

e.g., (he wants to hit him "but is chicken."
 "He should be defending the girl's
 honor, but decides to leave."
 "The police break up the fight."

5. TIME CONCERN

1) General description of category: Score all references to waiting, having enough time, keeping ahead of time, etc.

Examples:

"He is almost late now."
 "He arrived ahead of usual working hours."
 "Wanted to make sure he was working when the inspectors arrived."
 "It seems an interminable time to the tournament."
 "He will not have the time to count more than one."
 "He got permission before me." (which is bad for me)
 "They chat for a few moments, she hints until he leaves." (inference is clear that he is wasting her time)
 "He is working late to finish the job."

In general, a number of words related to time should alert the scorer about time concern. Although time is not always scored when these words occur, such words are usually present when "time" is scored. These words are:

before, now, just now, late, last, until, early, at the moment, promptly, quickly, fast, slow, momentary

2) In addition to the general description above, the following categories define time concern:

a. References to speed, going faster, hurrying, etc. Examples:

"He will depart from the area under some speed."
 "Secretary is unable to take dictation as rapidly as he can organize his thoughts."
 "He has been buried in his work the last few days."
 "gets around curve faster than the other guy"
 "It's funny how quickly one can be involved in the drama of the movie and how quickly it passes."
 "going nowhere fast on a virtual treadmill"
 "interested only in finishing what for him has been..."
 "to take a quick look at what is happening inside"

"occupied in the frantic hustle"
 "speeds his way home after..."
 "I better get back inside before they
 catch me."
 "Old age will come far too quickly."
 "Got to get home to get Miriam out."

b. Waiting

Explicit: explicit mention of such words as "wait"
Implicit: "When she arrives she find he hasn't come
 back." (Implication is that she has to
 wait for him)

c. "Eager or anxious anticipation" of a future point in time.

Examples: "hoping for the day when..."
 "hoping for the next fight"
 "He expects to go home soon."
 "He would like to take her out after
 they finish."
 "now nearly completed"
 "concerned whether the project would be
 completed on schedule"
 "She wants to finish dictating so she can
 start typing."

d. Wanting to shorten or expand time spans.

"wants to prolong his vacation"

e. Delays

Explicit: "They are delayed."
 "I always get delayed."
Implicit: as when external obstacle interrupts
 and delays an activity
 "As they are about to cross the street,
 a truck will come along..."
 "If they stop to pick up the drunk,
 there's trouble."

f. General uneasiness about time: When a person is "uneasy,"
 "itchy," and this uneasiness is related to time. "Uneasiness"
 about passing of time; "uneasiness" in character which could
 be eliminated by passage of time.

Examples: "both want to get home and forget about
 their work and work relations"
 "watchman getting tired of sitting around"
 (implication: he is uneasy about wasting time)

"endlessly seek truth"
 "if this thing will ever end"

g. Time concern in the author: Setting time limits for a given activity. The character in the story may not be concerned with time or time management, but the setting of time limits indicates that the author is.

"She will have a good healthy five-minute daydream."

Score only for short time spans:

"five minutes"
 "a few minutes"
 "a minute"

Score for long time spans only if they involve some "uneasiness" or concern:

"He still has a long way to go with his research."

But do not score long time spans, e.g., "a few months," when no such uneasiness is involved.

3) Do not score: Long time span references are not scored, e.g., references to the past or future as such. There must be a concern with time management, use of time, being on time, getting finished on time, etc.

Also do not score time references which are in the past and don't involve a time in the future even though there may be concern about time management.

e.g., "The girl is dragged off too late."

or, when the person has resigned to the fact that time has elapsed,

e.g., "He figured he could get some perspective, it's too late."

In these cases the time concern is not in the present, not a concern at the moment but simply a way of describing what happened in the past.

Also do not score time references that have primarily a competitive, spatial connotation as in the "ski" and "racer" pictures where there are references to getting in ahead of someone else.

6. FEAR

Score all references to fear, anxiety, worry, feelings of threat and danger. Such references have to be explicit, i.e., words like fear, afraid, etc. have to be mentioned. Score also if a general emotional state is indicated which clearly is fear.

Examples:

"He is afraid."
 "worried"
 "fearful"
 "anxious"
 "He fears."
 "The thought of what might follow upsets him."
 "He is nervous about meeting her father."
 "inwardly realizing his yellow streak"

Do not score:

"unsure and unwilling"
 "He doesn't really want to get involved but he must save face."
 "I don't want a fight."
 "trying to decide what the effect of running would be"

If fear is denied, score anyway

Score as fear:

"He is not afraid."
 "She is not worried at all."

Note: References to fear may be double scored in the Restraint category.

e.g., "He wants to go to bed with her. She is afraid." (Score both as restraint and fear.)

¹Reproduced by permission from Kalin, R. Alcohol, sentience, and inhibition: an experimental study. Unpublished doctoral thesis, Department of Social Relations, Harvard University, 1964.

APPENDIX C

Interview Schedule (R. A. Zucker & K. M. Fillmore)¹

Everyone reads in the magazines and newspapers, and hears on T.V. that teenagers are wilder and looser than they used to be. Sometimes the explanation is that this is the sign of the times, sometimes it is that kids just don't care as much about these things as older people did when they were this age. The fact of the matter is that nobody has very much information on what does happen... We would like to explore these topics with you, to find out what it is like in Somerville, to see if we can't get some real information for a change.

28. a. In terms of your own experience and what you have heard and read about, what things (activities) would be the kind that adults get excited or worried or upset about? (Free association) ...Anything else?
- b. What kind of behavior do you, as a teenager, consider inappropriate? (Free association) ...Anything else?
29. You mentioned sexual activity (use their term) as one of the things that adults are sometimes concerned about, and that some teenagers consider to be "out of bounds" activity. I'd like to talk a little about this, and the more general area of dating.
- a. About how much dating do you do? How often? Do you have a steady?
- b. How do you feel about flirting with girls (boys)?

¹Reproduced from Zucker, R. A. & Fillmore, K. M. "Interview Schedule" in R. A. Zucker, Assessment Instruments of the Adolescent Drinking Study (Part C). New Brunswick, New Jersey: Rutgers Center of Alcohol Studies, 1966. (Mimeo).

- c. When you do flirt, what kind of things are you likely to do?
(for boys)
What are the sorts of things you do to get boys to notice you?
(for girls)
- d. About how frequently would you say you do this? (regularly?
occasionally? rarely? never?)
- e.1 When you're with guys (girls) that you know, how much do you
talk about girls (boys)?
- e.2 What are you likely to talk about? Do you ever talk about
more (or less) than you've actually done? What?
- e.3 Do you ever talk to your friends about kidding around or
flirting with girls (boys) you've seen recently? What are
you likely to say?
- e.4 Do you ever mention conquests you've made of a particular
girl? (for boys)
Do you ever tell any of your girl friends how far you've
gone with boys (for girls)?
- f. Would you say you enjoy boasting (talking) about the times
you've had, or that you really don't care about it one way
or the other?

30. a. How far do most of the guys you know go with a girl?
- b. Do you think it's important to know a girl (boy) well before you kiss her?
- c. How about making out?
- d. How about going all the way (intercourse)?
31. How about what you've done? How far have you gone with girls? (kissing; making out; going all the way?)
- a. How often would you say you do this?
- b. Is this fairly usual when you go out with a girl (boy), or is it more likely that you don't go quite so far? What do you usually do?

(question #32 is omitted)

33. I'd like to turn back now, to the more general question of the different kinds of thing that teenagers do when drinking and when not drinking. Could you fill out this list now, indicating whether you've ever done any of the following things. Also, for the last year, we'd like you to indicate how many times you've done these

things when you haven't been drinking, and also, when you have been drinking.

(Interviewer: If not included in diary, go through the list again and establish, among items checked in last year, which were done during the last month when not drinking. Then establish which were done the month prior to this. Proceed backward on a month to month basis until the S has reported involvement in 3 activities when not drinking, or until you go back the full year. These situations are to be used in intensive follow-up. In establishing 3 activities, omit items 1-5 from tally.

Activities When Not Drinking

Date	Activity
1. _____	_____
2. _____	_____
3. _____	_____

TURN ON TAPE RECORDER

33 a.

During the past year indicate how many times you have done any of the following when drinking and when not drinking:

	WHEN NOT DRINKING	WHEN DRINKING
1. Played practical jokes on others	_____	_____
2. Sneaked into drive-in without paying	_____	_____
3. Crashed parties	_____	_____
4. Cut class	_____	_____
5. Smoked without parents' permission	_____	_____
6. Had auto accidents	_____	_____
7. Gotten into trouble with school authorities	_____	_____
8. Bought alcoholic beverages in N.Y.	_____	_____
9. Used false proof of age in buying alcohol	_____	_____

- | | | |
|--|-------|-------|
| 10. Had other people buy alcohol for you | _____ | _____ |
| 11. Drinking with no adults present | _____ | _____ |
| 12. Cursed at parent | _____ | _____ |
| 13. Cursed at teacher | _____ | _____ |
| 14. Had arguments | _____ | _____ |
| 15. Been in fights involving physical
attack | _____ | _____ |
| 16. Necking | _____ | _____ |
| 17. Making out (petting) | _____ | _____ |
| 18. Went "all the way" | _____ | _____ |
| 19. Been questioned by police
Specify_____ | _____ | _____ |
| 20. Refused to talk to someone you
usually talk to because of some-
thing they said or did | _____ | _____ |
| 21. Speeding | _____ | _____ |
| 22. Staying out overnight without
parents' permission | _____ | _____ |
| 23. Took dope | _____ | _____ |
| 24. Destroyed property | _____ | _____ |
| 25. Told people off | _____ | _____ |
| 26. Slashed tires | _____ | _____ |
| 27. Betting or gambling | _____ | _____ |
| 28. Been arrested. Specify_____ | _____ | _____ |
| 29. Broke off car radio antennas | _____ | _____ |
| 30. Let air out of someone's tires | _____ | _____ |
| 31. Stealing | _____ | _____ |
| 32. Marked up buildings or cars | _____ | _____ |

33. Shoplifting	_____	_____
34. Took pep pills	_____	_____
35. Took bennies	_____	_____
36. Beat up someone just for fun	_____	_____
37. Smoked marijuana	_____	_____
38. Breaking up someone's house during a party	_____	_____
39. Glue sniffing	_____	_____

APPENDIX D

Interview Rating Scales

S's report of dating frequency. (in last year)

1. Never dates in past or present.
2. Has had only one or two dates, usually for formal occasions (e.g., Jr.-Senior Prom, etc.).
3. Dates infrequently, once a month or less. Usually formal dates.
4. Dates occasionally. Two or three times a month. Most of the time formal dates.
5. Dates frequently. Usual dating pattern is twice a week or more. Formal and informal dates. (Informal dates would be defined as a coke date, boyfriend spending an evening studying at home of girl friend, etc.)
6. Dates very frequently. Dating in which S and boyfriend or girlfriend are together almost every evening for formal or informal dates.

Questions to be used for above code:

29a. About how much dating do you do? How often? Do you have a steady?

Coding Notes:

- a. (0) will not be used in this code.

S's report of non-steady - steady dating. (Permanency-non-permanency of dating relationships.)

1. S has never dated.
2. S has dated infrequently or frequently but has never established a "steady" relationship with the opposite sex.... "plays the field."
3. S has concentrated on dating one or two members of the opposite sex, but does not consider the relationship as "steady"; or, may have had one or two steadies in the past. Duration of each steady less than two months.
4. S has had one or more "steady" relationships in the past, and/or has gone steady for less than two months at present.
5. S has had a few "steady" relationships in the past - of fairly long duration, and/or is presently going steady for a period of 2-6 months.
6. S is presently going steady for a period of more than 6 months.

Note: For alternatives 4 and 5, if there is some contradiction in the alternatives given, rate according to the duration of the present steady relationship.

Questions to be used for above code:

29a. Do you have a steady?

Coding Notes:

- a. (0) will not be used in this code.

Extent of flirting skill.

1. None. Never flirts. Insofar as there is interaction with opposite sex, it tends to be formal with no sexual-affectionate implication.
2. Only indirect attempts. May make a point of talking with opposite sex, but usually about non-sexual-affiliative topics... e.g., schoolwork, team activities, etc. Usually very awkward in attempts at striking up conversation. For girls, this may take the form of occasional smiling at boys they like; indirect attempts to get friends to make introductions and the like. However, relative lack of ease in initiating flirting relationship without considerable help from the other person.
3. Mild direct flirting. More open, casual, in conversation than (2)...talk about dates, friends, joking, occasional teasing. Occasional awkwardness, but S usually is pretty much at ease in these kinds of interactions.
4. Moderate flirting. Open, casual, considerable kidding around. Easily initiates conversation with members of the opposite sex. More forward, teasing, than (3) - occasional kidding around about directly sexual content. On infrequent occasions, girls may attempt to be openly sexually provocative in dress, manner. For boys this may take the form of being physically familiar (e.g., arms around girl even though he barely knows her).
5. Strong flirting. Same as (4) except sexual element in relationship is obvious and occurs frequently. For boys this may involve aggressive sexuality, telling off-color stories, "roaming hands"; for girls this may involve being openly seductive in dress and manner, communicating the desire to "follow through" (even though in fact they may not).

Questions to be used for above code:

- 29b. How do you feel about flirting with girls (boys)?
- 29c. When you do flirt, what kind of things are you likely to do? (for boys)
What are the sort of things you do to get boys to notice you? (for girls)
- 29d. About how frequently would you say you do this (regularly? occasionally? rarely? never?)

Coding Notes:

A. Generally give less weight to passive signs of flirting (e.g., provocative or "in" appearance) and more weight to behavior.

b. Code down for interview signs of awkwardness in relating the details of flirting and/or lack of explicitness in description.

c. (0) should not be used in this code.

d. Generally code up for signs of indiscriminate flirting at any given level.

Extent to which S believes sexual intimacy should be linked to social intimacy (length of acquaintance).

1. No linkage necessary. If the girl (boy) is willing that is all that matters. This philosophy applies to intercourse as well as to making out, kissing.
2. Mild relationship felt to be necessary (i.e., a few dates) at least for intercourse and/or making out. It is more a question of "what the traffic will bear", although S wouldn't do these things the first date or two. Kissing usually on the first date.
3. Moderate relationship. S feels that one should know the partner fairly well - ie, be friends before heavy petting or intercourse. However, kissing is as likely not to occur just as a way of saying one enjoyed the relationship - even if it is only a first meeting.
4. Considerable relationship. Feels that intercourse should probably only occur after marriage - making out is OK if one person is serious about another - e.g. steady and/or thinking of marriage. Kissing OK if people just like each other and know each other a little.
5. Strong relationship. S believes intercourse definitely only belongs after marriage - and that making out really belongs after marriage also, although it is probably appropriate if people are engaged. People should know each other fairly well before kissing.
6. Very strong relationship. Intercourse and petting should only occur after marriage. People should know each other well before kissing.

Questions to be used for above code:

- 30b. Do you think it's important to know a girl (boy) well before you kiss her?
- 30c. How about making out?
- 30d. How about going all the way (intercourse)?

Coding Notes:

a. Although some attempt has been made to delimit multiple criteria for each code, based on different standards for intercourse, making out, and kissing, insofar as there is inconsistency between standards for kissing and the other two behaviors, give greater weight to the latter two in assigning the rating.

- b. (0) will not be used in this code.

S's report of heterosexual experience.

1. None.
2. Some mild kissing, nothing more.
3. Prolonged "making out" (deep kissing). Occasional mild petting (for girls, petting above the waist). Nothing more.
4. Occasional heavy petting (for girls, petting above and below the waist) no intercourse.
5. Frequent heavy petting, no intercourse.
6. Frequent heavy petting, intercourse on one or two occasions.
7. Considerable heterosexual experience (including intercourse on more than two occasions).

Questions to be used for above code:

- 30a. How far do most of the guys you know go with a girl?
- b. Do you think it's important to know a girl (boy) well before you kiss her?
- c. How about making out?
- d. How about going all the way (intercourse)?
31. How about what you've done? How far have you gone with girls? (kissing; making out; going all the way.)
- 31a. How often would you say you do this?
- 31b. Is this fairly usual when you go out with a girl (boy) or is it more likely that you don't go quite so far? What do you usually do?

Coding Notes:

APPENDIX E

Correlations between ratios of thematic sex,
thematic fantasy and overt sexual behavior

	<u>Peak</u>	<u>Petting</u>	<u>Intercourse</u>
<u>Total Sex</u>			
Total Sex + Total Restraint	-.13	-.05	-.01
<u>Total Sex</u>			
Total Sex + Personal Negative Aftermath + Impersonal Negative Aftermath	-.08	.01	.05
<u>Physical Aggression</u>			
Physical Aggression + Aggression Restraint	.06	.10	.01
<u>Total Ingestion</u>			
Total Ingestion + Total Inhibition	.15	.06	.07

APPENDIX F

It has been concluded in the present study that the lack of relationship between fantasy and behavioral variables used was due, in part, to differing levels of conceptualization. In brief, the behavioral variables reflected largely social influences i.e., secondary (learned) drives referring to conformity and approval, rather than "primary" or unlearned drives as originally assumed. In addition, fantasy itself appears to reflect, in part, social learning experiences in terms of the modulating effects of inhibition.

Where then does this leave the concept of primary drives? Is such a construct necessary given the above conclusion that when one factors out of human sexual behavior all social influences not much remains to serve as a source of variance. This would indicate, in short, that the concept of "primary drives" as a working construct not account for much. This question of course, refers to the old innate vs. learned controversy that pervades psychological writing and research. As such it falls out of the sphere of the present thesis: defining what or where drive is not central to the empirical task of relating thematic fantasy to behavior. The term "primary drive" has been used in the present study as a convenient term to discuss what seems obvious, namely that some motivated state precedes sexual behavior. The assumption of the term "primary" is that this motivator is a biological (unlearned) given. The phenomenal experience of increased sexual feelings and release would lend intuitive support to this. The data, indicating that social influences are very important in determining the frequency and quality of sexual behavior would not. It

is very hard to resolve this issue, since indeed, even the term "sexuality" is a broad one with many referents, some obvious in their relationship, others not.

The general point of view here is that the expression of sexuality is some function of the total personality which is, in turn a function of the past history of the individual. That past history is a biological no less than a social one and it is erroneous to conclude, as our present, socially oriented methodology would lead us, that biological factors are unimportant in determining human behavior. What has been called sexual behavior in this research has turned out, for reasons obvious enough to be social behavior, largely socially motivated. In fact, if one wishes to assume that the ultimate aim of sexual behavior is intercourse, then all the behavior studied here is appetitive--there is no index of consummatory behavior such as masturbatory orgasms or nocturnal emissions and few people had experienced intercourse.

One cannot draw from the present findings the conclusion that sexual behavior is the result of secondary drives (and thus that the concept of primary drives is irrelevant)--only that the behaviors used as criterion variables here are largely influenced by secondary drive factors and correlate with what is known about adolescents in general. No theorist at present claims seriously to understand all the influences of the secondary drives, let alone how they relate to their biologic underpinnings. And other theorists in the behavioral sciences might maintain that the various courting and mating patterns in human societies are elaborations of similar patterns found to be part of the evolutionary equipment of species lower on the phylogenetic scale. Remove as much learned behavior as possible

and one would still find the individual's experience of sexual feeling or arousal--i.e., an impulse to seek sexual stimulation or release.

This, it would seem, would be fundamental to the concept of a truly "primary" drive. It is maintained here that it is a fundamental fact of life and that no adequate theory or program of sex research can avoid it.

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