Unwed pregnancy in young women was conceptualized as a motivated goal interactively determined by both personality and situational factors. The primary behavioral correlate indicative of this predisposition is inadequate use of readily available birth control techniques (B.C.) for the sexually active female. In addition, sex frequency and the situational variable of degree of stability of the sexual relationship were also expected to be related to the motivation for motherhood. If this model is appropriate, then significant interactive differences should be found in fantasies about having children as a function of these variables, with stronger motivation (more fantasy) expected in inadequate B.C. users, involved in higher sex frequency, in more stable relationships. In addition to the obvious fantasy effects, it was expected that motivational differences of the same sort would also be reflected by measures of sex role style and gender identification on a more unconscious level. Subjects were 129 sexually active unmarried college women. The evidence is supportive of the hypothesis that unwed pregnancy is a motivated event rather than simple bad luck. Conclusions also concern themselves with the possibility that situational events (stability of relationships) may change personality structure. (Author)
Is unwed pregnancy motivated?\(^1,2\)

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Michigan State University and Luzerne-Wyoming Co.

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Over time, investigators concerned with the problem of unwed pregnancy have moved back and forth between two poles in their explanations. One group, historically coming more from a clinical, psychoanalytic perspective, have maintained that premarital pregnancy is a specifically motivated act, involving the acting out of largely unconscious but behaviorally relevant fantasies (e.g., Clothier, 1943; Deutsch, 1945; Roberts, 1966). Another, more behaviorally oriented position of more recent origin argues that unwed pregnancy is an accidental outcome of sexual activity (Furstenberg, 1971). This position draws largely from the inconclusive findings of differences between pregnant and non-pregnant unmarried women (e.g. Barker, 1969; Wagner and Slemboski, 1968) and the observation that where differences are found, they often relate to factors not directly tied to the motivational realm, such as use or non-use of adequate birth control techniques. A variant upon this second position views the pregnancy outcome as trait related. To put the matter another way, unwed pregnancy is only one of several outcomes of behavior which is itself a manifestation of personality trait differences—such as femininity, internal-external control, etc.—between subjects.

The work reported on here adopts a midway position, viewing unwed pregnancy as an interactive outcome of motivational (i.e. goal directed) characteristics in conjunction with long term, non-pregnancy related stylistic individual
differences and more short term situational influences. If the theory is correct, then appropriate motivational and personality differences should be found in subjects whose behavior leads them to be at high risk for conception.

In testing the theory, our motivational measure—in this case fantasies about having children—and the relevant personality measures, namely sex role style and gender identity, were treated as dependent variables. The primary behavioral correlate indicative of high pregnancy risk was judged to be inadequate use of birth control techniques by sexually active women living in an environment where birth control techniques are both readily available and easily discussed. In addition, coital frequency and the situational variable of degree of stability of the sexual relationship were considered to be relevant secondary influences. The primary hypothesis we tested was that stronger motivation (more fantasies about having children) would exist in inadequate birth control users, involved with higher sex frequency, in more stable relationships. Since we anticipated that personality attributes concerning feelings and conflicts about femininity would also relate to pregnancy risk, measures of these characteristics at relatively more and less conscious levels were also examined as dependent measures. Here we anticipated that femininity in the sense of conscious sex role style would be higher in inadequate birth control users (i.e. they would show themselves to be less assertive and more interdependent), but that unconscious gender identity would be less feminine. In addition we expected sex role style to vary with type of relationship involvement; i.e. more assertive, independently-minded women would be more likely to involve themselves in temporary relationships while more interdependent (stereotypically feminine) women would be more likely involved in stable relationships. However, relationship differences in gender identification were not anticipated.
Method

468 unmarried college women under conditions of guaranteed anonymity were given questionnaire materials which provided data on their sexual, contraceptive and dating experiences, daydreams about having children (our fantasy measure), McClelland and Watt's (1968) sex role style measure (assessing the assertiveness vs. interdependence dimension of feminine style), the more traditional California Personality Inventory (CPI) measure of femininity, and the Strodbeck (Strodbeck, Bezdek & Goldhammer, 1970) version of Franck's (Franck & Rosen, 1949) Drawing Completion measure of unconscious gender identification. From this group, 129 sexually active women were selected who satisfied the appropriate high-low criteria in the various categories. Hypotheses were tested using a 2x2x2 ANOVA design. The design and final cell ns are shown in Table 1 of the handout.

Insert Table 1 about here

Results and Discussion

Table 2 presents the results for the presumptive motivational measure—having recallable daydreams about having children. The analysis is chi-square for replicate four-fold tables. As the table shows, two main effects were obtained rather than the predicted interaction. Inadequate birth control users were more likely to report daydreaming about having children ($p < .05$); so also were women involved in longer term relationships ($p < .10$). Although a triple interaction was predicted, it should be noted that direction of the relationships obtained is consistent with our hypothesis; both inadequate birth control use and steady relationships relate to stronger pregnancy relevant fantasies. None of the other effects approached significance.
A multivariate ANOVA was computed on the remaining parametric measures. This yielded two significant interactions and no main effects. Univariate tests showed the interactions were attributable to sex role style and gender identity differences among subjects. These results are depicted in Figures 1 and 2 of the handout.

Figure 1 shows a clear relationship by birth control interaction, attributable to differences in femininity among adequate birth control users in temporary as compared to steady relationships. Those in steady relationships show themselves to be more interdependent. The implications of this finding are rather intriguing. Our hypothesis predicted an individual difference main effect that is consistent with the direction of these results. But the interaction between type of birth control use and type of relationship suggests that relationship may in fact shift conscious sex role style. This line of inquiry needs to be pursued.

Figure 2 shows results on the Franck test. Here a clear interaction is present, but it does not involve birth control use as initially predicted. In other words there is no evidence linking the primary behavioral index of pregnancy risk to gender identification style. Neither are Franck scores related to our motivational measure (r = -.02). In these respects the data indicate that pregnancy risk cuts across issues of femininity at a non-verbal representational level.

The observed effect is primarily attributable to group A, Ss with high sex frequency in temporary relationships. The data show them to be higher in
femininity than their high sex counterparts in steady relationships, and to their low sex counterparts in temporary relationships. Since birth control use is not implicated, these findings have more relevance to issues of femininity in the context of sexual expressivity. To the extent that the Franck instrument concerns itself more with the underlying sense of "femaleness" or its relative absence, then the data suggest that women able to manage regular intercourse in more short term relationships have a stronger sense of, and/or security about their femaleness as it relates to their bodies than do their lower sex frequency counterparts. The differences between the group A and B women are perhaps better explained in the context of saliency of body image experiences in the two groups. The data indicate that body experience is either more salient and/or more heightened in the women in temporary relationships. Conceivably this also is a function of situational effects upon what have been traditionally considered to be long term and stable personality predispositions.

One final note: given the unanticipated nature of these findings, they clearly need both replication and further elaboration.
REFERENCES


Footnotes


2. This report is based upon part of the second author's doctoral dissertation; the first author served as committee chairman. Order of authorship in no way reflects relative contribution to the work.
Tables for:

Is Unwed Pregnancy Motivated?*

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*Paper presented at Southwestern Psychological Association
Meetings, Albuquerque, New Mexico, April 1976.
Table 1
The Factorial Design of Birth Control Use
x Type of Relationship x Sex Frequency

<table>
<thead>
<tr>
<th>Birth Control Use</th>
<th>Type of Relationship</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>High Sex Frequency</td>
<td>Low Sex Frequency</td>
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<tr>
<td>Adequate</td>
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<tr>
<td>Steady</td>
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<td>35</td>
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</tr>
<tr>
<td>Inadequate</td>
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<td>19</td>
<td>13</td>
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</tbody>
</table>

Note.--Figures in table are cell ns.

Table 2
Percent of Subjects in Each Group Who Reported Daydreaming About Having Children

<table>
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<th>Birth Control Use</th>
<th>Type of Relationship</th>
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<th></th>
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</thead>
<tbody>
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<td></td>
<td></td>
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<tr>
<td>Adequate</td>
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<td>Steady</td>
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<td>60</td>
<td>60</td>
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<tr>
<td>Inadequate</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>84</td>
<td>85</td>
</tr>
</tbody>
</table>

Adequate-Inadequate Birth Control Use x Daydreaming: $\chi^2 = 5.05, p < .05$
Temporary-Steady Relationship x Daydreaming: $\chi^2 = 2.79, p < .10$
Figure 1. Birth Control Use X Type of Relationship Interaction for Mean Scores on Sex-Role Style.

Univariate Interaction $F = 4.78$ (df = 1,121); $p < .05$
Figure 2. Type of Relationship X Sex Frequency Interaction for Mean Scores on the Franck Drawing Completion Test.

Univariate Interaction $F = 6.32$ (df = 1,121); $p < .01$
B. 300-Word Abstract

Robert A. Zucker & Ginette B. Lemon

1. Title: Is unwed pregnancy motivated?

2. Topic Areas: Clinical; Personality; Adolescence; Human Sexuality; Human Motivation

3. Problem: Unwed pregnancy in young women was conceptualized as a motivated goal, interactively determined by both personality and situational factors. The primary behavioral correlate indicative of this predisposition is inadequate use of readily available birth control techniques for the sexually active female. In addition, sex frequency and the situational variable of degree of stability of the sexual relationship (short vs. long term) were also expected to be related to the motivation for motherhood.

If this model is appropriate, then significant interactive differences should be found in fantasies about having children as a function of these variables, with stronger motivation (more fantasy) expected in inadequate B.C. users, involved in higher sex frequency, in more stable relationships. In addition to the obvious fantasy effects, it was expected that motivational differences of the same sort would also be reflected by measures of sex role style and gender identification on a more unconscious level.

4. Procedure: 468 unmarried college women were given questionnaire material assessing sexual, contraceptive and dating experiences, daydreams about having children (fantasy measure), sex-role style (McClelland and Watt) and unconscious gender identity (Franck test). From this group, 129 sexually active women were selected to test the hypotheses, using a 2 x 2 x 2 ANOVA design (B.C. use x sex frequency x stability of relationship).
5. **Results and Conclusions:** The primary results were two main effects rather than an interaction; inadequate B.C. users were more likely to daydream about having children \((p < .05)\), as were women involved in more long term relationships \((p < .10)\). Sex role style results also were generally confirmatory of the hypotheses. A birth control x relationship interaction was found \((p < .03)\). Within temporary relationships, inadequate B.C. users (higher risk) were less assertive and more interdependent. A relationship by sex frequency interaction \((p < .01)\) also was observed relating to gender identification differences.

The evidence is supportive of the hypothesis that unwed pregnancy is a motivated event rather than simple bad luck. Conclusions also concern themselves with the possibility that situational events (stability of relationship) may change personality structure.