

Unintended Pregnancy in Low-Income Couples:
Supplemental Report on Phase III Data Analyses.

Report to The National Campaign
to Prevent Teen and Unplanned Pregnancy

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Introduction

This is a supplemental report that details the third and final phase of the analysis of data collected from a sample of 268 low income couples who were at risk of unintended pregnancy. In these analyses we have taken the trait, state, and decision-making variables that were found to successfully predict contraceptive outcome behaviors of both males and females in second phase of data analysis and examined how they perform when combined into couple variables and used to predict the same contraceptive outcome behaviors.

Theoretical Framework

We constructed two sets of couple variables. In the first set we combined the successful predictor variables from each male partner with the equivalent predictor variables from his female partner in three ways. First, we created a sum variable, consisting of the sum of each male and female partner's scores; next, we created a difference variable, consisting of the difference between the two partners' scores; and finally, we created an absolute difference variable, consisting of the absolute difference between the two partners' scores. Our theory is that these three types of couple variables represent three different types of effects on contraceptive behavior that results from couple interaction around the content or psychological domain of the particular variable. For example, if the variable content reflected each partner's positive motivation for having children, then the three different types of couple variables would reflect three different ways that the relative strength of two partners' positive childbearing motivation can interact to affect their joint contraceptive behavior. If we allow PCM-f and PCM-m to represent the strength of female and male partner's positive childbearing motivations, then the sum of PCM-f and PCM-m

may be thought of as measuring a Joint Partner Effect. The higher the score of the sum variable, the greater is the couple's joint positive motivation for having children. Similarly, the difference between PCM-f and PCM-m may be thought of as measuring a Partner Influence Effect. The higher the score of the difference variable, the greater is the influence of the positive childbearing motivation of the partner who is placed first when subtracting one partner's score from the other's. Of course, the lower the score of the difference variable, the greater is the influence of partner who is placed second. (In this study, we always put the female's score first and subtracted the male's score from it. Putting the male score first would only affect the sign of the predictor, not the interpretation of the predictor/outcome relationship) Finally, the absolute difference between PCM-f and PCM-m may be thought of as measuring a Partners Disagreement Effect. Absolute differences are calculated without any negative values because they represent the difference between two numbers, regardless of the direction of that difference. Therefore, the higher the score of the absolute difference variable, the more the two partners disagree with each other with respect to their positive childbearing motivation.

In the second set of couple variables we addressed the degree to which each member of a couple accurately perceived her or his partner. In order to accomplish this we selected successful predictor variables where we had measures of each partner's predictor and of each partner's perception of the other partner's score on the same predictor variable. For example, we asked both partners how satisfied they were with their current contraceptive method and how satisfied they thought their partner was with that method. By calculating the absolute difference between one partner's perception of the other's method satisfaction and the other's actual method satisfaction, and doing that for both partners, we can create two measures that reflect the degree of disagreement between each partner's perception of the other partner and the actuality of the other partner. Because we are again using an absolute value, this degree of disagreement is independent of direction of disagreement. Our theory is that these couple variables reflect bias in perception of partner and therefore may be thought of as measuring a Partner Misperception Effect, which we would expect to have consequences for contraceptive selection and use.

Sample

The sample consists of the same 268 couples that were studied in the report on the first two phases of data analysis. Their demographic characteristics have been

characterized in that report. As a criterion of inclusion in the study, these couples had to have been in a committed relationship for at least six months.

Measures

We utilized the same four groups of measures included in the previous analyses, including the psychological trait, psychological state, and couple decision-making predictors and the behavioral outcome variables. We selected from the larger pool of measures available from the original study only those that had been successful predictors in the previous analyses. One exception to this rule was that we added a new psychological state variable based on the respondents feelings of commitment in the current relationship because we believed that within-couple differences in commitment might be an important predictor in contraceptive use. The sex-specific frequency counts are shown in Table 1S.

Similar to Tables 3 through 6 from the Phase I report, we give in Tables 2S through 5S descriptive statistics or frequency counts for the first set of couple variables constructed from the individual trait, state, and decision-making predictor variables. These couple variables include those based on summing the female and male partners' scores (Sum variables), on calculating the signed difference between the two partners' scores (SDif variables), and on calculating the absolute difference between the two partners' scores (AbDif variables). In order to conserve space, only those variables that were actually retained in at least one of the regression analyses have been included in the tables. Missing values among these predictor variables were replaced with sex-specific median values for the multivariate analyses.

In Table 6S we give descriptive statistics for the second set of five couple variables which were constructed from those individual variables where we had both self-report and perception of partner's report of specific psychological state predictors. These couple variables, which we think of as partner perception variables, were based on calculating the absolute difference between each individual's perception of her or his partner's state and the partner's self-reported actual state. Unlike the first set of couple variables where there is one variable of each type per couple, in the case of the partner perception variables there are two variables of each type per couple, one for female partners and another for male partners. This difference occurs because the partner perception variables measure the accuracy of each partner's perception of the other partner. Again, only those variables that

were actually retained in at least one of the regression analyses have been included in the table. We treated missing values in the same way that we did for the first set of predictor variables, with sex specific median score imputation.

The reporting of couple contraceptive outcome variables presents a special challenge because there are some couples, especially in the case of those outcomes with an appreciable subjective rating component, where there is disagreement. In order to enable the reader to appreciate the degree and pattern of disagreement, we have presented in Table 7S the frequency counts for these variable in the form of couple cross-tabulations. In the construction of all of the couple outcome variables, we have declared missing any couple where one or both partners have missing data. In addition, in the construction of those couple outcome variables measuring effectiveness of method use and change of method at 6 month follow-up (i.e., those the regression analyses where a specific current contraceptive methods was used as a moderator variable) any couples where both partners did not agree on the current contraceptive method were declared missing. After these two steps, the couple behavioral outcome variables were defined as the sum of the male and female partners' scores on the individual level outcome variables. As can be seen from Table 7S, the great majority of couples report scores that are on the cross-tabulation diagonal, or in the case of the more subjective effectiveness of method use variables, on the cross-tabulation diagonal and one off the diagonal. Thus this summing procedure can be expected to produce a continuous variable where the great majority of scores represent couple agreement and where most of the remaining scores represent an averaging of only slight disagreement. A virtue of this approach is that it creates an ordinal outcome variable and permits the use of maximum likelihood regression analysis.

Data Analysis

We conducted two groups of multiple regressions analyses, in both cases using backward-stepping elimination of the least significant predictor until all remaining predictors were significant at the $p < 0.05$ level. In the first group we predicted the contraceptive behavioral outcome variables using all of the first set of sum, signed difference, and absolute difference variables to predict each outcome. Combining all three types of variables in one multivariate analysis was prompted by both a theoretical and a data analytic consideration. Theoretically, the three types correspond closely to three

features of the individual level, constrained regression analyses. The sum variables correspond to the individual level predictors when they are constrained to be equal across the two sexes. The signed difference variables correspond to instances in the constrained regressions where one sex has a significant effect and the other does not, as well as to instances where the couple decision-making variable dealing with couple responsibility has a significant effect. The absolute difference variables correspond to instances in the constrained regression where the two sexes have opposite effects, as well as to instances where the couple decision-making variable dealing with couple disagreement has a significant effect. By combining all three types and comparing those results with the constrained regression analysis using the same dependent variable, we are better able to see what, if anything is gained in couple analyses above and beyond what is obtained with the constrained individual level analyses.

The data analytic consideration has to do with the related effects of the three types of predictors in the couple regressions. It is likely that there will be some covariance between the sum, signed difference, and absolute difference variables because all three are calculated from the same two numbers. If we studied the predictive effects of each type separately, we could miss important interactions between the three types, as well as instances where one type is a significant predictor but only because it is highly correlated with another type that is a much more significant predictor.

In the second group of multiple regressions we predicted the different contraceptive behaviors using all five of the partner perception variables. We conducted these analyses separately from those conducted with the first set of predictors, in part because we did not wish to add another element to the design outlined in the previous two paragraphs and in part because we believe that misperception of the partner is an important phenomenon in and of itself that contributes to partner disagreement and influence. Combining the partner perception variables with the first set of predictors could well obscure that phenomenon, whereas conducting separate analyses allows the two separate sets of results to inform each other. An additional data analysis issue affected our decision to conduct separate analyses. Because there were both female and male versions of the partner perception variables, we needed to test for sex differences and therefore to conduct those analyses the way we did the individual level analyses, that is to say, by constraining male and female partners to be equal unless dropping those constraints improved model fit.

Results and Discussion

The Sum, Signed Difference, and Absolute Difference Regressions

In discussing the results of the first group of analyses, we will focus on the similarities and differences between the couple analyses reported here and the constrained, individual level analyses conducted in Phase II and reported previously. Tables 8S, 9S, and 10S show the results of the maximum likelihood regressions in which the sum, signed difference, and absolute difference variables are used as predictors of the couples' current contraceptive method, where that is, respectively, oral contraception, condoms, and Depo Provera. In these cases, and in all the regression results that follow, the parameter estimates are not standardized. We again remind readers that because the predictor and dependent variables have been collected at the same point in time, caution must be taken in the interpretation of causal relationships. Although it may be reasonable to conclude that the predictors in these analyses represent couple factors that influenced couples' decisions to select the specific method, some may well reflect post-decision influences of the method on the couple.

Comparing Tables 8S, 9S, and 10S with their Phase II equivalent, we note considerable similarity in which predictor variables are present and the relative strength of their predictive power. The similarity indicates that in almost all cases those variables with the strongest predictive power ($p < 0.005$) that are constrained to be equal across the sexes in the individual level analyses appear in the couple level analyses as sum variables. One predictor that does not follow that rule is the partner's contraceptive satisfaction, which becomes a signed difference variable in the couple level model. There are two interesting differences that involve the variables measuring a traditional gender role attitude and the experience of conflict. Both appear as strong predictors, equal across the sexes, in both the OC and Depo Provera individual level models. Both lose all or, in one case -the gender role variable in the OC model, most of their predictive power in the couple level models, where they appear to be replaced by two variables based on childbearing motivation and wanting to avoid pregnancy. In three of the four instances those two replacements are absolute difference variables. Both of these replacement variables have to do with motivation for pregnancy, suggesting that disagreement over this motivation may be at the heart of both the effect of gender role attitudes and the experience of conflict reported by our sample.

Finally, we note important differences between the individual and couple level models with respect to Partner Influence Effects and Partners Disagreement Effects. In the three individual level models, influence effects are indicated by the three instances where either one sex has a significant effect and the other does not (once in the OC model and twice in the condoms model) or where the couple decision-making variable dealing with couple responsibility has a significant effect (once in the OC model, coinciding with the single sex effect). In the individual level models, a disagreement effect is indicated by the one instance in the Depo Provera model where the couple decision-making variable dealing with couple disagreement has a significant effect. Compare this to the couple level models where four signed difference predictors (one of these being the couple decision-making variable dealing with couple responsibility) and four absolute difference predictors occur.

Interpretations of the signed difference and absolute difference variables in these three tables tend to be mostly straight forward and to be meaningful with respect to contraceptive behavior. Consider two examples of signed difference variables. The finding for the partner's contraceptive confidence variable in Table 8S suggests the following: when females perceive their male partners as being more confident about using their current method than their male partners perceive them, the couples' method is likely not to be oral contraception. Complimentary to that interpretation is the following one, suggested by the contraceptive confidence variable in Table 9S: when females perceive themselves as being more confident about using their current contraceptive method than their male partners perceive themselves to be, the couples' method is likely not to be condoms. Two other examples illustrate the interpretation of the absolute difference variables. The finding for the wanted to avoid pregnancy variable in Table 8S suggests that the greater the disagreement between female and male partners about avoiding pregnancy, the less likely they are to be currently using oral contraception. On the other hand, the complementary finding for the wanted to avoid pregnancy variable in Table 10S suggests that the greater the disagreement between female and male partners about avoiding pregnancy, the more likely they are to be currently using Depo Provera.

Table 11S shows the results of the maximum likelihood regressions in which the sum, signed difference, and absolute difference variables are used as predictors of the effectiveness of couples' current contraceptive method relative to other methods. There are two important conclusions that may be drawn from these findings. First, the list of predictor variables is considerably reduced from those participating in the previous three

tables and includes the most significant group of predictors from those tables. This group of predictors may therefore play a central role in determining the importance placed by couples on the effectiveness of their method. Second, the proportion of variance accounted for is substantially greater than that accounted for in the constrained regression model, 50% versus 37.5%. Because we used different techniques in the two sets of current contraceptive method regressions (logistic and maximum likelihood), such a comparison between the explanatory power of the constrained individual and couple level models was not readily made. The findings shown in Table 11S indicate that by taking couple level phenomena into account, explanatory power is improved.

Tables 12S and 13S show the models that resulted from using sum, signed difference, and absolute difference variables as predictors of the effectiveness with which couples use their contraceptive method, among current OC and condom users respectively. In the OC couple model we see several differences compared with the constrained individual model. For one thing, in the latter model three of the seven predictors are male only. Interestingly, two of the variables reflecting male only effects are absent in the couple level model. The third male only variable, disagreement in couple decision-making about their current contraceptive method, is retained but presents an entirely different and more complex interpretation. Instead of greater couple disagreement as reported by males predicting more effective use among OC users, the couple model indicates first that greater summed couple disagreement predicts less effective OC use, and second that more disagreement reported by the woman relative to what her male partner reports predicts less effective OC use. Although this second finding is entirely compatible with the individual model finding, the two taken together present a substantially different and more complex picture compared with that of the individual model finding. Therefore we are inclined to see this as an example where couple modeling provides a more complete understanding of the interpersonal dynamics that affect contraceptive method use.

Other differences between the individual and couple models of effective OC use include the appearance of mutual couple commitment as a predictor of effective OC use, the appearance in the couple model of disagreement about positive childbearing motivation as a predictor of effective OC use (again associated with the nonappearance of the experience of conflict variable, which occurred in the individual model), and the appreciably greater proportion of variance explained in the couple model, in spite of the presence of fewer variables.

In the model of effectiveness of contraceptive method use among condom users shown in Table 13S, the most striking finding are the changes in the predictors from the individual level model. These changes involve both the domain and the form of the predictor. Two of the five predictors in the individual model deal with the domain of contraception and one with alcohol use and sexual behavior among females. All three are absent in the couple model. Two of the five predictors carry over to the couple model, including gender role attitudes in males and negative childbearing motivation, although the latter changes from its negative to its positive version. Because there is a large childbearing attitude component in the gender role variable, both of these variables may be said to deal with the domain of childbearing and reproduction. Two new variables appear in the couple model, both having to do with wanting to avoid pregnancy. Of particular interest, all four of the variables in the couple model take either a signed difference or an absolute difference form. Thus the four variables in the couple model reflect the way that the couple dynamics of influence and disagreement in relation to motivation for pregnancy affect the effectiveness of condoms use. Another striking finding in comparing the two models is that the couple model has almost twice the explained variance of the individual model.

The results of the two couple models where the sum, signed difference, and absolute difference variables are used to predict change in method at the six month follow-up interview among initial OC and condom users is shown in Tables 14S and 15S, respectively. The two most significant predictors in the individual level model of change from OC use are the only predictors in the couple models. One appears as a signed difference variable, which is entirely consistent with its form in the individual model. It is not clear why the emotional closeness and wanted to avoid pregnancy variables, both of which had P values below 0.01, did not make an appearance in the couple model. One possibility is that 10% of the sample was lost to the couple model either because the two partners did not agree on which method they were using initially or only one partner was available to follow up. In such cases individuals contribute to the individual level model but are lost to the couple level model.

The most significant predictor of the individual model of change from condoms use is the only variable retained in the couple model, although it changes from the perception of the partner wanting to avoid pregnancy to the respondent wanting to avoid pregnancy. The other two variables in the couple model have no equivalent to any of the other eight in the individual level model. The interpretation of the three variables in the couple model make

intuitive sense; the sum of wanting to avoid pregnancy increases the likelihood of stopping condom use, disagreement about negative childbearing motivation decreases the likelihood of stopping condom use, and male partners reporting greater disagreement about the decision to use condoms than their female partners increases the likelihood of stopping condom use. However meaningful these findings, the small N of the couple regression, together with the loss of 16% of the individual level sample, may have contributed to the instability of findings, making direct comparability between the individual and couple models less informative.

The Perceived Partner Regressions

We turn finally to a discussion of the results of the second group of multiple regressions where we predicted six of the contraceptive outcome behaviors using all five of the absolute difference partner perception variables, whose statistical properties are described in Table 15S. In these regressions we examined three contraceptive behaviors: current contraceptive method at the initial interview, the effectiveness with which that method was being used at the initial interview, and whether the couple had changed their method at the six month follow up interview. For comparability purposes, we limited our analyses to the two most frequently used contraceptive methods: OC and condoms. The results of these regressions are shown in Table 17S.

We identified four patterns associates with four of the partner perception predictors across the contraceptive method by behavioral outcome design of our analyses. The partner perception predictor based on relationship commitment did not appear in the results. The first pattern involves contraceptive satisfaction. The more females and males misperceived the satisfaction of their partners with the couples' current contraceptive method, the less likely that method was to be OC and the more likely it was to be condoms. This suggests a poor communication between partners about their satisfaction with condoms. The other two parts of this first pattern include the findings that greater misperception of contraceptive satisfaction predict less effective use of condoms and a discontinuation of OC at follow up, outcomes that may well be aggravated by poor communication. The second pattern involves a predictor variable closely related to contraceptive satisfaction, namely contraceptive confidence. This pattern has two parts. The more males misperceived their partners' confidence in the couples' current contraceptive method, the less likely that

method was to be OC and the more likely it was to be condoms. This seems to be quite similar to the first part of the first pattern, except that it involves only males, perhaps because condoms is a method where males are likely to have developed confidence in use. The second part of this pattern involves the finding that greater misperception of partner contraceptive confidence at the initial interview by both males and females predicts discontinuation of OC at follow up. The involvement of both sexes here suggests that the use of oral contraception requires two-way communication between partners to build confidence in both of them.

The third pattern involves the misperception of the partner's emotional closeness. The greater that misperception is, the less effectively both OC and condoms are used as a contraceptive method. This suggests that a misunderstanding of the extent of intimacy and trust in the couples' relationship may reduce the incentive among females for the routine behavior required by OC use and interfere among both males and females with the complex cooperation required by condoms use. The fourth pattern involves misperception of how much the partner wanted to avoid pregnancy. A finding with borderline significance is that among males, misperception of their partners' wanting to avoid pregnancy is associated with not using condoms. This may reflect the fact that male condom users learn quickly how motivated their partners are to avoid pregnancy either by being prompted not to worry about using a condom or by being prompted to be sure to use one. In the second part of this pattern our findings show that greater misperception of partners' wanting to avoid pregnancy results in more effective condom use and not discontinuing condoms at the follow up for both sexual partners. This counter-intuitive finding may reflect the fact that a significant fraction of our sample of both males and females are highly motivated to avoid a pregnancy and therefore take charge with respect to making sure that condoms are used regularly and correctly. These individuals may be so determined to avoid pregnancy that they have not discussed the matter with their partners and/or their partners have withheld any mention of their desires in the face of that determination. Although this explanation might be seen as not working as well for females as for males, we believe that there could be a substantial group of females who closely monitor their partners' condom use, prompting reminders when necessary. If this account of more effective condom use is correct, then we would expect couples who manifest this pattern not to be motivated to discontinue condom use at follow up.

Conclusion

The results of our couple level modeling of the psychological determinants of contraceptive behavior are highly informative. When we constructed couple level variables by calculating the sums, signed differences, and absolute differences of the same variables used in our individual level modeling and then modeled the prediction of contraceptive behaviors with those couple level variables, we obtained findings that lead to the following conclusions. First, the couple level models contained fewer predictors and, in all cases where direct comparison was feasible, greater explanatory power. Second, the couple level models showed greater numbers of influence and disagreement effects and these effects were related to specific psychological domains. Third, in cases where new variables appeared in the couple level models and seemed to replace variables from the individual level models, the results were more meaningful for understanding what was driving contraceptive behavior. Fourth, the picture that emerged from the couple analyses appeared to be richer and more complete with respect to couple dynamics. When we constructed partner perception variables based on the absolute difference between perception and actuality, we found that the couple's selection, use, and discontinuation of their contraceptive method were all influenced by misperception of a sexual partner. These misperceptions involved the partners' feelings about pregnancy motivation, their satisfaction with the contraceptive method currently being used, and the amount of emotional closeness they felt in the relationship. It seems likely that these influences contributed to the influence and disagreement effects observed as a result of the first set of couple analyses. There is clear value to be obtained in the individual level modeling of behaviors that are in essence couple level phenomena. Our identification of sex similarities and differences in the prediction of contraceptive behaviors is a case in point. However, this study gives every indication that couple level modeling considerably augments our ability to explain and understand these behaviors and therefore to design and implement useful interventions.

Table 1S. Frequency Counts for Psychological State Variables Related to Feelings of Commitment in Current Relationship, Separately by Sex

Variable	Males (N = 268)		Females (N = 268)	
Category	Frequency	Column %	Frequency	Column %
Feelings of Commitment				
1 = None	0	0.00	0	0.00
2	1	0.37	0	0.00
3	0	0.00	1	0.37
4	2	0.75	1	0.37
5	0	0.00	1	0.37
6	3	1.12	3	1.12
7	10	3.73	16	5.97
8	44	16.42	23	8.58
9	49	18.28	44	16.42
10 = Maximum Closeness	159	59.33	179	66.79
Partner's Feelings of Commitment				
1 = None	0	0.00	1	0.37
2	1	0.37	1	0.37
3	0	0.00	0	0.00
4	1	0.37	2	0.75
5	1	0.37	6	2.24
6	10	3.73	11	4.10
7	11	4.10	13	4.85
8	38	14.18	30	11.19
9	47	17.54	47	17.54
10 = Maximum Closeness	159	59.33	157	58.58

Table 2S. Descriptive Statistics for Selected Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Trait Variables.

Variable Category					
Specific Variable	Mean	S.D.	Minimum	Maximum	N
<u>Contraceptive Attitudes</u>					
Effective Birth Control–Sum	3.70	1.79	-3.67	6.00	265
Effective Birth Control–SDif	0.00	1.32	-4.67	4.67	265
Anti-Oral Contraception–Sum	3.32	4.28	-9.00	12.00	265
Anti-Oral Contraception–SDif	0.00	2.69	-10.50	10.50	265
Anti-Oral Contraception–AbDif	2.04	1.76	0.00	10.50	265
Anti-Coitus Dependent–Sum	5.47	3.88	-5.68	11.67	265
<u>Gender Role Attitudes</u>					
Traditional Gender Role–Sum	21.64	5.51	10.00	37.00	268
<u>Childbearing Motivation</u>					
Positive Motivation–AbDif	12.77	11.43	0.00	72.00	268
Negative Motivation–Sum	103.29	19.85	49.00	157.00	268
Negative Motivation–AbDif	12.42	10.08	0.00	63.00	268
<u>Cognitive Disorder</u>					
Attention Concentration Deficit–Sum	15.94	6.03	0.00	34.00	266

Table 3S. Frequency Counts for Selected Sum and Signed Difference (SDif)
 Psychological State Variables Related to Current Contraceptive Method (N=268)

Variable		
	Category	Frequency Column %
Confidence in ability to use current contraception-Sum	5	1 0.38
	7	1 0.38
	8	1 0.38
	9	1 0.38
	10	3 1.14
	11	3 1.14
	12	4 1.52
	13	2 0.76
	14	7 2.65
	15	15 5.68
	16	13 4.92
	17	23 8.71
	18	35 13.26
	19	49 18.56
20	106 40.15	
	Missing	4
Confidence in ability to use current contraception-SDif	-7	1 0.38
	-6	2 0.76
	-5	4 1.52
	-4	6 2.27
	-3	7 2.65
	-2	12 4.55
	-1	29 10.98
	0	122 46.21
	1	35 13.26
	2	18 6.82
	3	12 4.55
	4	9 3.41
	5	5 1.89
	7	1 0.38
8	1 0.38	
	Missing	4

Table 3S Continued.

Variable		
	Category	Frequency
		Column %
Partner's confidence in ability to use current contraception-SDif		
	-9	3
	-7	1
	-6	2
	-5	3
	-4	3
	-3	6
	-2	16
	-1	35
	0	108
	1	36
	2	18
	3	15
	4	7
	5	4
	7	2
	8	2
	9	1
	Missing	6
Satisfaction with current contraceptive Method-Sum		
	6	5
	7	5
	8	4
	9	5
	10	2
	11	8
	12	6
	13	9
	14	13
	15	20
	16	19
	17	30
	18	39
	19	33
	20	66
	Missing	5

Table 4S. Frequency Counts or Descriptive Statistics for Selected Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables Related to Current Relationship and Recent Pregnancy Desires (N=268)

Variable		
Category	Frequency	Column %
Partner's Feelings of Emotional Closeness-AbDif		
0	91	34.47
1	88	33.33
2	53	20.08
3	14	5.30
4	11	4.17
5	5	1.89
7	1	0.38
8	1	0.38
Missing	4	
Feelings of Commitment-AbDif		
0	132	49.25
1	80	29.85
2	36	13.43
3	15	5.60
4	3	1.12
6	2	0.75
Partner's Feelings of Commitment-Sum		
6	1	0.37
8	1	0.37
10	2	0.75
12	1	0.37
13	6	2.24
14	2	0.75
15	10	3.73
16	22	8.21
17	31	11.57
18	39	14.55
19	47	17.54
20	106	39.55

Table 4S Continued.

Variable Category					
Specific Variable	Mean	S.D.	Minimum	Maximum	N
<u>Recent Pregnancy Desires</u>					
Wanted to Avoid Pregnancy-Sum	34.76	7.04	4.00	40.00	266
Wanted to Avoid Pregnancy-SDif	0.00	4.88	-18.00	18.00	266
Wanted to Avoid Pregnancy-AbDif	2.91	3.91	0.00	18.00	266
Partner Wanted to Avoid Pregnancy-SDif	0.00	5.19	-18.00	18.00	266

Table 5S. Frequency Counts for Couple Sum and Signed Difference (SDif) Variables Related to Decision-Making about Current Contraceptive Method (N=268)

Variable		
Category	Frequency	Column %
Who had primary responsibility for choosing contraceptive method-SDif		
-4	36	13.43
-3	31	11.57
-2	55	20.52
-1	52	19.40
0	73	27.24
1	13	4.85
2	6	2.24
3	2	0.75
How much disagreement between respondent/partner about method-Sum		
2	170	63.43
3	42	15.67
4	17	6.34
5	7	2.61
6	16	5.97
8	1	0.37
9	1	0.37
10	14	5.22
How much disagreement between respondent/partner about method-SDif		
-4	5	1.87
-3	1	0.37
-2	6	2.24
-1	31	11.57
0	197	73.51
1	18	6.72
2	4	1.49
4	6	2.24

Table 6S. Descriptive Statistics for Four Absolute Difference Partner State Perception Variables Used in the Second Set of Couple Regression Analyses, Separately by Sex.

Variable Category - Sex					
Specific Variable	Mean	S.D.	Minimum	Maximum	N
<u>Contraceptive Methods States-Females</u>					
P/A Partner Contracep. Confid.	1.25	1.79	0.00	9.00	263
P/A Partner Contracep. Satisfac.	1.88	2.08	0.00	9.00	264
<u>Current Relationship States-Females</u>					
P/A Partner Emotional Closeness	1.08	1.18	0.00	8.00	267
<u>Pregnancy Desire States-Females</u>					
P/A Partner Wanted to Avoid Preg.	2.46	3.67	0.00	18.00	266
<u>Contraceptive Methods States-Males</u>					
P/A Partner Contracep. Confid.	1.33	1.75	0.00	9.00	263
P/A Partner Contracep. Satisfac.	1.82	1.93	0.00	9.00	264
<u>Current Relationship States-Males</u>					
P/A Partner Emotional Closeness	1.11	1.18	0.00	7.00	265
<u>Pregnancy Desire States-Males</u>					
P/A Partner Wanted to Avoid Preg.	2.56	3.58	0.00	15.75	268

Note: P/A Partner = the absolute difference between the perceived and actual partner state.

Table 7S. Cross-Tabulations of Male/Female Partner Frequencies for Contraceptive Behaviors

Female Partners	Male Partners				
<u>Variable: Current Contraception-OC</u>					
	0	1			
0 = Not Oral Contraception	147 54.85%	4 1.49%			
1 = Oral Contraception	7 2.61%	110 41.04%			
N = 268, Missing = 0					
<u>Variable: Current Contraception-Condoms</u>					
	0	1			
0 = Not Condoms	189 70.52%	10 3.73%			
1 = Condoms	8 2.99%	61 22.76%			
N = 268, Missing = 0					
<u>Variable: Method Effectiveness</u>					
	1	2	3	4	5
1 = No Method	3 1.13%	0 0.00%	2 0.75%	0 0.00%	0 0.00%
2 = Rhythm, Withdrawal	0 0.00%	22 8.30%	3 1.13%	0 0.00%	0 0.00%
3 = Cond, Diaphr, Spermicide.	1 0.38%	5 1.89%	52 19.62%	2 0.75%	0 0.00%
4 = OC	0 0.00%	1 0.38%	2 0.75%	110 41.51%	3 1.13%
5 = Depo Provera, IUD, Norpl	1 0.38%	1 0.38%	2 0.75%	2 0.75%	53 20.00%
N = 268, Missing = 3					

Table 6S Continued.

	Female Partners		Male Partners		
<u>Variable: Effectiveness of Method Use-OC</u>					
	1	2	3	4	5
1	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
2	0 0.00%	0 0.00%	2 1.92%	1 1.16%	0 0.00%
3	0 0.00%	2 1.92%	22 21.15%	4 3.85%	12 11.54%
4	0 0.00%	1 1.16%	5 4.81%	10 9.62%	7 6.73%
5	1 1.16%	1 1.16%	4 3.85%	6 5.76%	26 25.00%

N = 111, Missing = 7

<u>Variable: Effectiveness of Method Use-Condoms</u>					
	1	2	3	4	5
1	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
2	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
3	0 0.00%	0 0.00%	5 8.33%	2 3.33%	2 3.33%
4	0 0.00%	1 1.67%	3 5.00%	2 3.33%	5 8.33%
5	0 0.00%	1 1.67%	6 10.00%	8 13.33%	25 41.67%

N = 67, Missing = 7

Table 6S Continued.

Female Partners	Male Partners	
<u>Variable: Changed from OC at 6 Month FU</u>		
	0	1
1 = No	44 53.66%	6 7.32%
2 = Yes	6 7.32%	26 31.71%
N = 87, Missing = 5		
<u>Variable: Changed from Condoms at 6 Month FU</u>		
	0	1
1 = No	15 36.59%	3 7.31%
2 = Yes	1 2.44%	22 53.66%
N = 47, Missing = 6		

Table 8S. Results of Maximum Likelihood Regression of Current Contraception, OC on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Dyadic Traits</u>			
Effective Birth Control Attitude-Sum	0.1073	3.35	0.0009
Anti-Oral Contraception Attitude-Sum	-0.0504	-4.26	<.0001
Anti-Coitus Dependent Attitude-Sum	0.0742	4.94	<.0001
Traditional Gender Role Attitude-Sum	-0.0231	-2.56	0.0110
Negative Childbearing Motivation-AbDif	-0.0099	-1.98	0.0485
<u>Dyadic States</u>			
Partner's Contraceptive Confidence-SDif	-0.0654	-2.98	0.0032
Wanted to Avoid Pregnancy-AbDif	-0.0391	-3.07	0.0023
Model -2 Residual Log Likelihood with 7 Degrees of Freedom = 689.4 N = 268			
Proportion of Variance Accounted for = 0.3290			

Table 9S. Results of Maximum Likelihood Regression of Current Contraception, Condoms on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Anti-Oral Contraception Attitude-Sum	0.0975	11.30	<.0001
Anti-Coitus Dependent Attitude-Sum	-0.0770	-8.22	<.0001
Attention Concentration Deficit-Sum	0.0254	4.38	<.0001
Negative Childbearing Motivation-AbDif	0.0074	2.16	0.0314
<u>Psychological States</u>			
Contraceptive Confidence-SDif	-0.0379	-2.18	0.0305
<u>Dyadic Decision-Making</u>			
Couple D-M Responsibility-SDif	0.0566	2.38	0.0182
Model -2 Log Likelihood with 6 Degrees of Freedom = 496.4 N = 268			
Proportion of Variance Accounted for = 0.5609			

Table 10S. Results of Maximum Likelihood Regression of Current Contraception, Depo Provera on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Anti-Oral Contraception Attitude-Sum	-0.0608	-5.87	<.0001
Attention Concentration Deficit-Sum	-0.0170	-2.30	0.0225
Positive Childbearing Motivation-Sum	-0.0045	2.68	0.0079
<u>Psychological States</u>			
Contraceptive Confidence-SDif	0.0526	2.37	0.0186
Partner's Contraceptive Confidence-Sum	0.0473	2.84	0.0049
Wanted to Avoid Pregnancy-AbDif	0.0313	2.77	0.0061
Model -2 Residual Log Likelihood with 6 Degrees of Freedom = 625.2			N = 268
Proportion of Variance Accounted for = 0.2069			

Table 11S. Results of Maximum Likelihood Regression of Current Contraceptive Method Effectiveness on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Anti-Oral Contraception Attitude-Sum	-0.1966	-9.89	<.0001
Anti-Coitus Dependent Attitude-Sum	0.1421	6.31	<.0001
Attention Concentration Deficit-Sum	-0.0357	-2.52	0.0123
Negative Childbearing Motivation-Sum	-0.0103	-2.39	0.0175
<u>Psychological States</u>			
Contraceptive Confidence-Sum	0.1982	6.08	<.0001
Contraceptive Confidence-SDif	0.1240	2.97	0.0032
Model -2 Residual Log Likelihood with 6 DF = 943.6 N = 265 Proportion of Variance Accounted for = 0.5011			

Table 12S. Results of Maximum Likelihood Regression of Effectiveness of Current Contraceptive Method Use, OC on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Anti-Oral Contraception Attitude-Sum	0.1413	3.73	0.0003
Positive Childbearing Motivation-AbDif	0.0294	2.53	0.0131
<u>Psychological States</u>			
Partner's Feelings of Commitment-Sum	0.2547	3.06	0.0028
<u>Dyadic Decision-Making</u>			
Couple Decision-Making Disagreement-Sum	-0.1263	-2.30	0.0238
Couple Decision-Making Disagreement-SDif	-0.2491	-2.05	0.0434
Model -2 Residual Log Likelihood with 5 DF = 386.1 N = 105			
Proportion of Variance Accounted for = 0.2725			

Table 13S. Results of Maximum Likelihood Regression of Effectiveness of Current Contraceptive Method Use, Condoms on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Dyadic Traits</u>			
Traditional Gender Role Attitude-AbDif	-0.1625	-2.62	0.0189
Positive Childbearing Motivation-AbDif	0.0338	2.21	0.0065
<u>Dyadic States</u>			
Wanted to Avoid Pregnancy-SDif	0.0778	2.66	0.0102
Partner Wanted to Avoid Pregnancy-SDif	-0.0790	-2.19	0.0330
Model -2 Residual Log Likelihood with 4 DF = 206.4 N = 61			
Proportion of Variance Accounted for = 0.3477			

Table 14S. Results of Maximum Likelihood Regression of Changed Contraceptive Method, OC at Follow Up on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Anti-Oral Contraception Attitude-SDif	-0.0745	-2.09	0.0394
<u>Psychological States</u>			
Contraceptive Satisfaction-Sum	-0.1045	-2.78	0.0068
Model -2 Residual Log Likelihood with 2 Degrees of Freedom = 214.2 N =82			
Proportion of Variance Accounted for = 0.1502			

Table 15S. Results of Maximum Likelihood Regression of Changed Contraceptive Method, Condoms at Follow Up on the Dyadic Sum, Signed Difference (SDif), and Absolute Difference (AbDif) Variables derived from the Individual Trait, State, and Couple Decision-Making Variables.

Variable Category			
Specific Variable	Parameter Estimate	t Value	P Value
<u>Psychological Traits</u>			
Negative Childbearing Motivation-AbDif	-0.0327	-2.07	0.0453
<u>Psychological States</u>			
Wanted to Avoid Pregnancy-Sum	0.0556	2.42	0.0205
<u>Dyadic Decision-Making</u>			
Couple Decision-Making Disagreement-SDif	-0.5722	-2.27	0.0294
Model -2 Log Likelihood with 3 Degrees of Freedom = 112.5 N = 41			
Proportion of Variance Accounted for = 0.2873			

Table 16S. Results of Maximum Likelihood Regressions of Six Behavioral Outcome Variables on Five Absolute Difference State Perception Variables, with Equality Constraints Initially Imposed across Males and Females.

Behavioral Outcome Variable	Parameter Estimate	t Value	P Value	Variance Accounted For
<u>Current Contraception, OC</u>				0.0397
P/A Partner Contraceptive Confidence	0.0262	0.78	0.4344	
P/A Partner Contraceptive Confid. x Sex ¹	-0.1067	-2.28	0.0232	
P/A Partner Contraceptive Satisfaction	-0.0880	-3.99	<.0001	
 <u>Current Contraception, Condoms</u>				0.0319
P/A Partner Contraceptive Confidence, Male	0.0607	2.03	0.0426	
P/A Partner Contraceptive Satisfaction	0.0652	3.48	0.0005	
P/A Partner Wanted to Avoid Preg., Male	-0.0285	-2.00	0.0464	
 <u>Effectiveness of Method Use, OC</u>				0.0227
P/A Partner Emotional Closeness	-0.2873	-2.77	0.0061	
 <u>Effectiveness of Method Use, Condoms</u>				0.1671
P/A Partner Contraceptive Satisfaction	-0.1810	-3.09	0.0025	
P/A Partner Emotional Closeness	-0.2896	-2.98	0.0035	
P/A Partner Wanted to Avoid Pregnancy	0.1158	3.08	0.0026	
 <u>Changed from OC at 6 Month F.U.</u>				0.0688
P/A Partner Contraceptive Confidence	0.1077	2.40	0.0178	
P/A Partner Contraceptive Satisfaction	0.0888	2.17	0.0318	
 <u>Changed from Condoms at 6 Month F.U.</u>				0.0385
P/A Partner Wanted to Avoid Pregnancy	-0.0752	-2.29	0.0248	

¹Males and females are significantly different but only males are different from zero.

Note: P/A Partner = the absolute difference between the perceived and actual partner state.