9. Contraceptives make sex seem less romantic.
10. Females who use contraceptives are promiscuous.
11. I would not have intercourse if no contraceptive method was available.
12. I do not believe that contraceptives actually prevent pregnancy.
13. Using contraceptives is a way of showing that you care about your partner.
15. I would feel embarrassed discussing contraception with my friends.
16. One should use contraceptives regardless of how long one has known his/her sexual partner.
17. Contraceptives are difficult to obtain.
18. Contraceptives can actually make intercourse seem more pleasurable.
19. I feel that contraception is solely my partner’s responsibility.
20. I feel more relaxed during intercourse if a contraceptive method is used.
21. I prefer to use contraceptives during intercourse.
22. In the future, I plan to use contraceptives any time I have intercourse.
23. I would practice contraception even if my partner did not want me to.
24. It is no trouble to use contraceptives.
25. Using contraceptives makes a relationship seem too permanent.
26. Sex is not fun if a contraceptive is used.
27. Contraceptives are worth using, even if the monetary cost is high.
28. Contraceptives encourage promiscuity.
29. Couples should talk about contraception before having intercourse.
30. If I or my partner experienced negative side effects from a contraceptive method, we would use a different method.
31. Contraceptives make intercourse seem too planned.
32. I feel better about myself when I use contraceptives.

Contraceptive Utilities, Intention, and Knowledge Scale

LARRY CONDELLI,1 University of California, Santa Cruz

The Contraceptive Utilities, Intention, and Knowledge Scale (CUIKS) was developed to test a social psychological model of contraceptive behavior developed by Condelli (1984). This model combined elements of the health belief model (Rosenstock, 1974), Luker’s (1975) model of contraceptive risk taking, and Fishbein and Ajzen’s (1975) behavioral intention model. Consequently, it is appropriate for use when examining any of these models or the unified model. It can also be used to study women’s knowledge and perceptions about contraceptive methods, their attitudes about pregnancy, and to measure intention to use contraception.

It also asks the likelihood she will use her method at each act of intercourse over the next year. This item is designed to measure intention to use contraception. One item measures attitude about becoming pregnant at the present time. This part of the scale also has the respondent rate the degree of subjective social support she expects from “people who are most important” to her for using each of four methods of contraception (diaphragm, IUD, the pill, and condoms). Part one also includes an item asking the respondent to state her current method of contraception.

Part two of the scale (Questions 7 and 8 in the Exhibit) has 16 items and measures respondent attitudes about four methods of contraception. The respondent indicates her perceptions of the effectiveness of each method. Her concerns about effects from using each method are also measured.

The third part of the scale is a multiple-choice knowledge test. This test is divided into two parts. The first part is an 8 item test of general knowledge of conception and contraception. The second part is a 4 item test that measures

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the respondent’s knowledge of the primary birth control method she is currently using. Although the test contains four items for each of the four methods of contraception, the respondent answers only the four questions dealing with her method.

The CUIKS was developed to be used in a family planning clinic. It was tested at the clinic on over 600 women of highly diverse age and educational backgrounds. Consequently, it can be used on any population of women.

Response Mode and Timing

The scale is designed to be self-administered either individually or in a group setting. Respondents indicate their answers by circling the number that best represents their feelings. For the knowledge scale portion, respondents circle the letter that indicates what they believe to be the correct answer. The scale requires an average of 15 minutes to complete.

Scoring

For parts one and two of the scale, the number circled on the scale is used as the respondent’s score on the item. Items 1 and 4 represent the respondent’s perceived susceptibility to becoming pregnant, with higher scores indicating a greater likelihood. Item 3 measures intention to use the chosen contraceptive method; Item 6 measures the degree of subjective normative support expected by the respondent for using each method. Both items are positively scaled. Item 5 measures the perceived severity of pregnancy for the respondent and is scored by assigning a value of 7 to the first, most negative statement (It would be the worst thing that could happen) and a value of 1 to the last, most positive statement (It would be the best thing that could happen). The intermediate statements decrease in value consecutively according to their order listed in the item (e.g., the third statement down, It would be sort of bad but not terrible, is assigned a value of 5, the following statement a 4, etc.).

For part two of the scale, the value circled by the respondent is the score for that item. The scores for Item 7 on effectiveness and convenience of the methods are reverse scored.

For the knowledge portion of the scale, items are scored as correct or incorrect. Two scores are then derived by summing the number of correct answers. Items 1 through 8 comprise the general knowledge subscale; the four items relating to the respondent’s chosen contraceptive method make up the specific knowledge subscale. A total score is computed by adding general and subscale scores. The correct answers are indicated by an asterisk in the Exhibit. No response on an item is scored as incorrect.

Reliability and Validity

The reliability of the knowledge scale was computed using responses from 632 women visiting a suburban family planning clinic. For the total knowledge scale, Condelli (1986) reported the Kuder Richardson 20 was .62. The reliability is somewhat low due to the varied nature of the topics covered in the scale.

The validity of the scale has been demonstrated through its ability to predict contraceptive behavior and contraceptive choice. Condelli (1984) obtained four measures of contraceptive behavior from women who had completed the scale an average of 6 months previously. Using multiple regression, a significant proportion of variance of each behavioral measure was accounted for using Items 1, 5, 6, 7, and 8 as predictor variables. For Items 7 and 8, only the respondent’s rating of the effectiveness, convenience, concern about minor side effects, and concern about major side effects of her own chosen contraceptive method were used in the analysis.

The behavioral measures examined included whether the respondent had unprotected intercourse at any time since completing the scale (coded 0 or 1; \( R = .21 \)); frequency of use of her chosen contraceptive method on a 4 point scale (1 = every time, 4 = less than half the time; \( R = .36 \)); period of time in weeks the respondent had been sexually active without using contraception (\( R = .42 \)); and ranked actual use of effectiveness of the chosen contraceptive method (\( R = .38 \)). All multiple Rs were significant at the .05 level or less.

Condelli (1986) also used the scale to predict choice of contraceptive. Women who chose to use the pill were compared with diaphragm users in a discriminant function analysis, with the scale items and total knowledge test score as predictors. The scale significantly distinguished pill users from diaphragm users on their reported belief the diaphragm was more inconvenient to use and the pill more convenient, expressing less concern about the pill’s side effects, believing they were more protected from pregnancy when using the pill and more susceptible when not using it, and having less knowledge about contraception. More than 60% of the variance between the groups was explained by the discriminant function.

Additional Information

The CUIKS may be copied and used, with appropriate citation, without cost.

References


In the original instrument, there were four items for the IUD. Because of the infrequent use of the IUD by women in the U.S. today, these items have been removed from this edition of the Exhibit, to save space.
Exhibit

The Contraceptive Utilities, Intention, and Knowledge Scale

Attitude Survey

1. If you were not to use birth control, how likely do you think it is that you would become pregnant during the next year? (Circle one category)

1 Very unlikely
2 Somewhat unlikely
3 Neutral neither likely or unlikely
4 Somewhat likely
5 Very likely

2. What form of birth control have you chosen to use? ________________

3. How likely do you think it is that you will use the above method every time you have intercourse over the next year?

1 Very unlikely
2 Somewhat unlikely
3 Neither likely or unlikely
4 Somewhat likely
5 Very likely

4. If you were to continue using this form of birth control, how likely do you think it is that you would become pregnant during the next year? (Circle one category)

1 Very unlikely
2 Somewhat unlikely
3 Neutral neither likely or unlikely
4 Somewhat likely
5 Very likely

5. Below are a number of statements about how you might feel about becoming pregnant within the next year. Please place a check in front of the one that best represents how you feel. (Check one only)

If I were to get pregnant within the next year:
___ It would be the worst thing that could happen to me.
___ It would be very bad.
___ It would be sort of bad but not terrible.
___ It would be O.K.
___ It would be sort of good but not terrific.
___ It would be very good.
___ It would be the best thing that could happen to me.

6. People who are important to you may have feelings about the type of birth control you might use. For each birth control method below, please indicate how the people who are most important to you would feel about your using that form of contraception. (Circle the number from 1–5 that best represents their feelings.)

They would be:
1 = Very much opposed (would discourage use)
2 = Somewhat opposed
3 = Neither opposed nor in favor (neutral)
4 = Somewhat in favor
5 = Very much in favor (would encourage use)

<table>
<thead>
<tr>
<th>Method</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foam/condoms</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>IUD</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

7. Different birth control methods vary in how effective or ineffective they are in preventing pregnancy. They also vary in how convenient they are to use. For each birth control method listed below, please rate how effective you think they would be in preventing you from becoming pregnant, and how convenient or inconvenient they would be for you to use. (Circle the number from 1–5 that best represents your feelings.)
**Contraception**

1 = Very effective  
(definitely prevents pregnancy)

2 = Pretty effective

3 = Unsure

4 = Pretty ineffective

5 = Ineffective  
(would not prevent pregnancy)

1 = Very convenient  
(no trouble at all)

2 = pretty convenient

3 = Unsure

4 = Pretty inconvenient

5 = Very inconvenient  
(too much trouble to use)

### Effectiveness vs. Convenience

<table>
<thead>
<tr>
<th>Method</th>
<th>Effectiveness</th>
<th>Convenience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foams/condoms</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>1 2 3 4 5</td>
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</tr>
<tr>
<td>IUD</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

8. Different forms of birth control vary in terms of how likely they are to have side effects. Some side effects may be minor, such as irritation of or skin problems, while others may be major, such as increasing risk of serious illness. For each method of birth control below, please rate how concerned you would be about the occurrence of both minor and major side effects. (Circle the number from 1–5 that best represents your feelings.)

<table>
<thead>
<tr>
<th>Minor side effects</th>
<th>Major side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foams/condoms</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
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<td>1 2 3 4 5</td>
</tr>
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<td>IUD</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

### Knowledge Survey

Circle the correct response.

1. The pill:
   *a. prevents ovulation
   b. keeps cervical mucus very thin
   c. changes the lining of the uterus to make implantation unlikely
   d. both a & c
   e. all of the above

2. According to the most accepted current thought, the IUD’s effectiveness is due to:
   *a. changing levels of hormones
   b. changed functioning of the fallopian tubes
   *c. preventing implantation of the fertilized egg
   d. preventing ovulation
   e. all of the above

3. A diaphragm should be used:
   *a. without any cream or jelly
   b. with any type of lubricant
   *c. with spermicidal jelly or cream inside it
   d. either with or without spermicidal jelly

4. Contraceptive foam is most effect in preventing pregnancy when inserted inside the vagina:
   *a. right before intercourse
   b. 2–4 hours before intercourse
   c. right after intercourse
   d. all of the above

5. The use of a condom when having sexual intercourse is recommended because:
   *a. if used right, it usually prevents getting or giving gonorrhea
   b. it can be bought in a drug store by both men and women
c. it does not have dangerous side effects
*d. all of the above

6. A woman can get pregnant:
   a. a few minutes after sexual intercourse
   b. a few hours after sexual intercourse
   c. a few days after sexual intercourse
   *d. all of the above
   e. a and b

7. Over a one year period, what is the likelihood that a sexually active woman who uses no birth control will become pregnant?
   a. 1 in 10
   b. 5 in 10
   c. 7 in 10
   *d. 9 in 10

8. A woman is most likely to become pregnant (no matter how long or short her menstrual cycle) if she has sexual intercourse about:
   a. 1 week before menstruation begins
   b. 2 weeks after menstruation begins
   *c. 2 weeks before menstruation begins
   d. 1 week after menstruation begins

Answer these questions only if you decided on the pill as your primary method of birth control.

1. Some warning signs that may signal the onset of pill related problems are:
   a. chest pain
   b. yellowing of the skin
   c. pain in the calf of the leg
   *d. all of the above
   e. none of the above

2. Medical conditions that make it dangerous for a woman to use the pill are:
   a. high blood pressure
   b. heavy smoking
   c. diabetes
   d. both a & b
   *e. all of the above

3. Present evidence indicates that the most serious side effect of the pill is:
   a. cancer
   *b. blood clotting problems
   c. chloasma
   d. nausea
   e. creating permanent sterility

4. Which of the following group of women has the highest risk of side effects if they use the pill?
   a. women who have never had children
   *b. women over 40 who smoke
   c. women who have severe menstrual cramps and are 10–20 lbs. overweight
   d. women who have been on the pill for more than 5 years.

This completes the survey. Thank You!

Answer these questions only if you have decided on the diaphragm as your primary method of birth control.

1. After intercourse, a diaphragm:
   a. should be removed immediately to prevent infection
   b. can be taken out after 2 hours
   *c. must be left in place for at least 8 hours
   d. must be left in place for at least 12 hours

2. A problem that may result from using a diaphragm is:
   a. increased pelvic infection
   b. increased cervical infection
**Contraception**

3. When a diaphragm is properly in place:
   *a. the woman will not be able to feel it
   b. the woman will be able to feel it
   c. both partners will be able to feel it
   d. both b & c

4. A diaphragm must be fitted by a health professional because:
   a. the risk of complication is high
   *b. it must fit properly over the cervix
   c. it is a difficult and risky medical procedure
   d. all of the above
   e. both a and b

This completes the survey. Thank You!

**Answer these questions only if you have decided on the foam and/or condoms as your primary method of birth control.**

1. The actual user effectiveness rate of foam and condoms is equal to or better than the actual user rates of:
   a. an IUD
   b. a diaphragm
   c. the pill
   *d. all of the above
   e. none of the above

2. To use a condom correctly, a person must:
   a. leave some space at the tip for the sperm
   b. use one every time sexual intercourse occurs
   c. hold it on the penis while withdrawing from the vagina
   *d. all of the above
   e. none of the above

3. When having sexual intercourse, the use of both contraceptive foam and condoms is recommended because:
   a. the man and the woman are sharing the responsibility for avoiding pregnancy
   b. the woman is less likely to become pregnant than if only one of these is used
   c. they can both be purchased at the drug store without prescriptions
   *d. all of the above
   e. a and c

4. Contraceptive (birth control) foam is most effective for the repeated acts of sexual intercourse:
   a. if a single application is used
   *b. if an additional application is used before each act of sexual intercourse
   c. if a woman douches after each act of intercourse
   d. all of the above
   e. b and c

This completes the survey. Thank You!