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**SCHOOL OF NURSING**

**MASTER'S PROGRAM PROJECT OPTION (PLAN B)**
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TITLE OF PROJECT Analysis of Contraceptive Self-Efficacy in Clients Requesting Emergency Contraception

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1 Analysis of Contraceptive Self-Efficacy in

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13

13 Abstract

14 Objective: To analyze the level of contraceptive self-efficacy in women
15 requesting emergency contraception (EC), and to suggest appropriate assessments
16 and interventions to promote optimal contraception.
17 Design: A quantitative survey administered to 55 clients requesting emergency
18 contraception over a 3-month time span.
19 Setting: One Planned Parenthood community clinic in San Jose, California.
20 Patients/Participants: Women who were 18 years or older, English speaking, and
21 requesting emergency contraception were asked to complete the survey by clinic
22 staff.
23 Interventions: No interventions were performed in the study. Implications for
24 practice are suggested by the interpretation of the survey data.
25 Main Outcome Measure(s): Participants scored high on the contraceptive self-
26 efficacy (CSE) scale in comparison with the normative samples.
27 Results: Clients in this setting requesting emergency contraception have a high
28 level of contraceptive self-efficacy.
29 Conclusion: Contraceptive counseling with clients requesting emergency
30 contraception should acknowledge their level of self-efficacy and allow for
31 mutual decision-making.
32 Keywords: contraceptive self-efficacy (CSE), emergency contraception (EC),
33 morning after pill, family planning,

34 Callouts

35 Method failures are always possible, but are usually preventable. (Callout should
36 appear with background and significance)
37 The population who is utilizing EC is an educated group of women. They adhere
38 to the recommended time constraints of EC, and have had a great amount of
39 experience with continuous birth control methods, yet they are not currently
40 utilizing a method. (Callout should appear with discussion)
41 Self-efficacy should be reinforced during interactions with these clients, but does
42 not necessarily require interventions aimed at increasing self-efficacy. (Callout
43 should appear with practice implications)
44

44 # Analysis of Contraceptive Self-Efficacy in
45 Clients Requesting Emergency Contraception

46 ## Background and Significance

47 Contraception is always a "hot topic". It becomes even more so when it
48 involves adolescents. It is not uncommon to have a Monday morning rush, in the
49 family planning clinic, with women requesting post-coital contraception or
50 emergency contraception (EC), after the clinic has been closed over the weekend.
51 Many of these women are adolescents. With the wide availability and near 100%
52 efficacy of today's birth control methods, it is curious that EC is requested in the
53 quantity in which it is dispersed. In the literature related to EC many studies
54 discuss the effectiveness and availability of the method, but little else. There is
55 minimal published information regarding the characteristics of women utilizing
56 EC.

57 EC is suggested for use in the instance of a failure of a (barrier)
58 contraceptive method, or if no contraception is utilized at the time of intercourse,
59 when pregnancy is not desired. Anecdotal clinical observations show that it is
60 being used by sexually active women who are not using a contraceptive method
61 for unclear reasons, but that do not desire to become pregnant.

62 Optimal contraception would be abstinence, or the utilization of a reliable
63 continuous birth control method. Promotion of either of these methods may be

64 appropriate for some and not for others. Accurate individual assessment is
65 needed to allow for appropriate intervention.

66 Many proponents of EC note in their studies that its 75-89% effectiveness
67 can greatly decrease unwanted pregnancies and elective abortions. (Coeytaux &
68 Pillsbury 2001; Gold, Sucato, Conard, & Hillard 2004; Grossman 2001; Hayes
69 Hutchings & Hayes 2000; Roye & Johnsen, 2002). The need for increased access
70 and utilization of EC is mentioned in the literature, but little is noted about how to
71 utilize client interaction to promote continual contraception.

72 Emergency contraception is a form of post-coital contraception that helps
73 to prevent pregnancy from occurring. The woman takes the prescribed amount of
74 oral hormones within the first 120 hours after unprotected intercourse when
75 pregnancy is not desired. Emergency contraception is not to be confused with
76 RU-486 or the abortion pill. If the woman has already become pregnant,
77 emergency contraception will not harm or terminate the pregnancy; it is only used
78 to prevent pregnancy from occurring. The methods of action are: inhibiting
79 ovulation, disrupting follicular development and/or interfering with the
80 maturation of the corpus luteum (Gold et al. 2004).

81 Occasionally there is confusion about EC. It is also known as the morning
82 after pill, or the Yuzpe regimen, Plan B or Preven (Gold et al. 2004). It was
83 originally a combination of high dose progesterone and estrogen in the form of
84 multiple pills of a 28-day pack of oral contraceptives and then repeating the dose

85 12 hours later. Progesterone only formulations, such as Plan B, balance high
86 efficacy and safety, with minimal side effects. Current recommendations from
87 the Society of Adolescent Medicine are to take the two prescribed tablets at once,
88 rather then waiting 12 hours before the second dose (Gold et al. 2004).
89 This article discusses the level of contraceptive self-efficacy (CSE) in
90 women requesting EC. CSE is defined by Levinson, Wan, &Beamer (1998) as
91 the strength of conviction that a sexually active individual should and can control
92 sexual and contraceptive situations to achieve a contraceptively protected priority.
93 Emergency contraception, just as it is titled, is to be used in an "emergency". The
94 insight gained by the interpretation of the results of this study suggests
95 interventions related to the client's perceived ability to control sexual and
96 contraceptive situations and their utilization of EC.
97 When a client requests EC it is assumed that they either experienced a
98 contraceptive method failure, or that they weren't using a contraceptive method.
99 Method failures are always possible, but are usually preventable. Continuous
100 contraceptive methods are generally safe, efficacious and easily accessible. This
101 study analyzes the level of contraceptive self-efficacy (CSE) in clients requesting
102 emergency contraception in order to develop a better understanding of the
103 challenges perceived by these clients. The study also suggests appropriate
104 assessments and interventions based on data reflecting self-efficacy.
105

106 Literature Review

107 Levinson (1986) initially developed the CSE tool to better understand the
108 characteristics of the contraceptively self-efficacious teenager. She used it with a
109 group of 258 female clients age 20 or younger in a family planning clinic in
110 Sunnyvale California. Effective contraception was reported as 23% for this
111 sample. In the factor analysis of the scale four factors emerged. These factors
112 were (a) conscious acceptance of sexual activity by planning for it, (b) assumption
113 of responsibility for the direction of sexual activity and for using contraception,
114 (c) assertiveness in preventing sexual intercourse in an involved situation and (d)
115 strong feelings of sexual arousal (Levinson 1986).

116 Levinson (1995b) utilized the research from the previous article and
117 results from a survey of 263 women age 20 or younger in a Chicago, Illinois
118 family planning clinic. These results were used to further analyze the CSE
119 construct in relation to reproductive and contraceptive knowledge (RCK) and
120 contraceptive behavior. In addition to the CSE tool, the respondents were asked
121 to provide information on contraceptive use, demographics, sexual experience, an
122 index of reproductive and contraceptive knowledge (IRCK), and psychosocial
123 factors. Results of this study found that the CSE statements are behaviorally
124 specific to the kinds of cognitive, emotional, and physical situations and demands
125 that teenage women experience over time in being sexually active and in trying to
126 use contraceptives. The data analysis of this study showed that CSE is related to

127 contraceptive behavior, but did not show a direct relation between knowledge and
128 contraceptive practices. Effective contraception was reported as 30% for this
129 sample (Levinson 1995b).

130 The Sunnyvale and Chicago samples were compared with results of the
131 survey administered in two other settings. In Montreal by Bilodeau, Forget and
132 Tetreault (1994), the tool was translated into French and used with 231 $9^{th}$ and
133 $10^{th}$ grade males and females in the classroom setting. Effective contraceptive use
134 was reported as 62% for the sexually active portion of this sample.

135 The tool was also used in the classroom setting in two separate studies and
136 results were combined into the American sample of 148 undergraduate college
137 males and females. Heinrich's (1993) study at a Northeastern university, and
138 Wright's (1992) study of black college students combined to create this college
139 sample for comparison with Sunnyvale, Chicago and Montreal. In both of these
140 College samples, Contraceptive Self-Efficacy scores were significantly related to
141 contraception and were the most important predictors of contraceptive use.
142 Effective contraception was reported as 21% for this sample.

143 In the data provided as normalization for possible clinical use of the items
144 the Chicago sample was omitted because of its variance in the response metric.
145 The Chicago sample used a 3-point scale whereas the other samples used a 5-
146 point scale. This comparison yielded recommendations for the further use of the
147 scale as a total item set with a 5-point scale for comparisons with the provided

148 sample norms. A recommendation to extend CSE analyses to older adolescents
149 was also identified, as well as its use with a variety of young women's
150 contraceptive behaviors (Levinson Wan &Beamer 1998).

151 Conceptual Framework

152 Bandura's (1986) research on self-efficacy serves as a theoretical
153 framework for this study. The motivational factors of the individual utilizing EC
154 are in question. The results of the survey uncover areas for further research and
155 implications for assessment and intervention related to the perceived self-efficacy
156 of women requesting EC. In Bandura's (1986) discussion of the self-efficacy
157 mechanism in human agency, the need for accurate appraisal of one's own
158 capabilities in order to facilitate successful functioning is highlighted. It is noted
159 that large misjudgments of personal efficacy in either direction have
160 consequences. Individuals who overestimate their capabilities can undertake
161 activities that are unmanageable; likewise, people tend to avoid tasks that are
162 perceived as exceeding their capabilities. It is noted by Bandura that "people who
163 regard themselves as highly efficacious act, think and feel differently from those
164 who perceive themselves as inefficacious. They produce their own future, rather
165 than simply foretell it." (p. 395)

166 In order to facilitate optimal contraception it is important to not only
167 identify the level of self-efficacy in clients but also to instigate a call to action.
168 Bandura (1986) discusses this relationship between self-efficacy judgment and

169 action. Individuals must not only perceive themselves as efficacious, but they
170 must also embody the necessary subskills for the exercise of personal agency.
171 Even if an individual has the skills and a strong sense of self-efficacy they must
172 also perceive the task as important, and see an intrinsic or extrinsic incentive for
173 their performance.

174 Methodology

175 Design

176 This is a quantitative descriptive study to measure CSE in a convenience
177 sample of 55 clients requesting EC at one Planned Parenthood location. In
178 addition to the CSE survey, questions requesting background information from
179 the patients were asked.

180 Approval to carry out the study was obtained by San Jose State's
181 Institutional Review Board (IRB) as well as Planned Parenthood's Director of
182 Clinical Trials. Authorization to use the CSE tool was obtained from its author.

183 The Planned Parenthood clinic staff were informed of the study, and asked to
184 disperse the surveys to clients. The surveys were collected weekly, and the
185 results analyzed after a 55 completed surveys were obtained.

186 Participants were asked to read the informed consent, and completion of
187 the survey implied informed consent. Participation was anonymous and not
188 associated with the services rendered by Planned Parenthood. The participants

189 were asked to retain the information and consent form and return the completed
190 survey with other paperwork required for the visit.

191 Sample

192 All women who entered a Planned Parenthood clinic in San Jose and
193 requested EC were asked to complete the survey. There were no demographic
194 criteria for participation in the study with the exception of gender and age. Only
195 women are able to obtain EC, and only women were asked to complete the
196 survey. Clients must have been at least 18 years of age in order to consent to
197 participate in the study.

198 The survey took approximately 10 minutes to complete. The average wait
199 time for a clinic visit was 20-30 minutes, so there were no additional time
200 constraints for the clients asked to participate in the study. There was no
201 compensation awarded to the subjects for participating in the study. There were
202 no direct risks of completing the study with the exception of any unforeseen
203 mental anguish that may be caused by the sensitive subject matter of the questions
204 related to sexuality and contraception.

205 Instruments

206 Levinson (1998) developed a CSE scale that has been utilized in the
207 analysis of contraceptive behavior, specifically motivational barriers to
208 contraceptive use among sexually active teenagers. It measures strength of
209 conviction that one can control sexual and contraceptive situations in order to

210 prevent pregnancy. The CSE tool was designed as a diagnostic tool for clinicians
211 and educators to aid in the design and assessment of interventions; it may also be
212 used as a research instrument for further work in reproductive health (Levinson,
213 1995a).
214 The 18-question Likert scale assesses CSE using situational items which
215 respondents rate on a scale from 1 (not at all true of me) to 5 (completely true of
216 me). Participants are asked to rate their congruence with behaviors in these
217 sexual and contraceptive situational vignettes (See Appendix). Higher scores
218 represent higher CSE. Item numbers 2, 5, 6, 8, 9, 11, 12, 14 and 15 are reverse
219 scored with a lower score representing higher CSE. Item 8, related to "discourse
220 of desire" was consistently predictive of contraceptive behavior across three of
221 the four samples in which it was analyzed (Levinson 1995a).
222 Face and content validity of the CSE tool was established by factor
223 analytic techniques that examined the scale in relation to contraceptive behavior
224 (Levinson 1986). A reliability coefficient of .73 was determined by using
225 Cronbach's alpha across investigations (Levinson 1995a).
226 Data Analysis
227 The 18 item, CSE survey and additional demographic questions yielded a
228 variety of descriptive data regarding the type of client who is utilizing EC. The
229 CSE Likert scale responses were averaged and compared to results from previous
230 studies to interpret the level of contraceptive self-efficacy in this population.

231 Results

232 The sample consisted of primarily Caucasian (38.2%) and Hispanic
233 (32.7%) women between the ages of 18 to 29 years (mean = 21 years). Religious
234 affiliation was reported by 78.2% of the clients. The reported religious
235 affiliations were overwhelmingly Catholic/Christian. Over two thirds (78.2%) of
236 the women reported current college attendance. See Table 1.

237 Over one fifth of the clients (21.8%) reported no current birth control
238 method, and almost half (49.1%) were using condoms only. The majority (69%)
239 of these women had previously used at least one birth control method other than
240 condoms. Common birth control methods included pills, patch, and Depo
241 Provera. Almost one fourth (23.6%) of women reported using no birth control
242 method for at least one year. Over half (50.9%) of the respondents reported side
243 effects as a barrier to contraceptive use. See Table 2.

244 On average the clients had used EC one time in the last year, with 30.9%
245 of women having used it 2 or more times. Over half (50.1%) of women were
246 timely in getting to the clinic within the first 24 hours after unprotected
247 intercourse. Very few (5.4%) women arrived at the clinic after 72 hours had
248 passed. See Table 3.

249 Over half (58.2%) of the respondents were having intercourse at least once
250 a week, or >4 times per month. Less than one fourth (21.8%) of the women had

251 ever been pregnant. Of the pregnancies that had occurred in these women, two
252 thirds (66.6%) ended in abortion. See Table 4
253 The analysis of the data showed that clients requesting EC in this study
254 scored higher on the CSE scale than the Sunnyvale sample on all items with the
255 exception of item 8. In comparison with the Montreal, and College samples this
256 sample scored similarly with the values reported as normative data by Levinson,
257 Wan and Beamer (1998). A graphical depiction of the mean scores for these four
258 groups is presented in Figure 1.
259 Discussion
260 Figure 1 shows a comparison of mean CSE item scores between the San Jose
261 sample discussed in this research, and the Sunnyvale, Montreal, and college
262 samples presented in Levinson Wan &Beamer (1998) as normative data. The San
263 Jose sample showed the highest CSE scores in two factors: assumption of
264 responsibility for sexual activity and contraception, and assertiveness in
265 preventing sexual intercourse. This sample also had the highest CSE scores in 2
266 of the 5 items related to strong feelings of sexual arousal. For of the remaining
267 items related to this factor, the San Jose group scored close to the highest score.
268 However, for Item 8 the San Jose group scored the lowest. Item 8 related to
269 "discourse of desire" was found to be consistently predictive of contraceptive
270 behavior across three of the four samples in which it was previously analyzed. A
271 low score would suggest that the San Jose sample did not exercise control over

272 contraceptive behavior. The San Jose group did not score as well on items related
273 to the factor of conscious acceptance of sexual activity. See Table 5
274 It is insightful that the San Jose sample scored so low in CSE on Item 8. The
275 item reads: There are times when I'd be so involved sexually or emotionally that I
276 could have intercourse even if I weren't protected (using a form of birth control).
277 This is exactly the phenomenon in which EC is indicated for use. The survey
278 results are congruent with anecdotal observations. This observation indicates that
279 these women are in need of interventions that increase their acceptance of sexual
280 activity and reproductive consequences.
281 The population who is utilizing EC is an educated group of women. They
282 adhere to the recommended time constraints of EC, and have had a great amount
283 of experience with continuous birth control methods, yet they are not currently
284 utilizing a method. Their consistent high self-efficacy scores on the CSE scale
285 related to sexual and contraceptive responsibility and assertiveness in preventing
286 sexual intercourse show much promise. Their lower CSE scores related to
287 conscious acceptance of sexual activity identify possible areas for intervention.
288 The most common barrier to continual contraception reported was side
289 effects. Specific side effects were not stated, but over half (50.9%) of women
290 indicated that side effects were a barrier to contraceptive use. It is possible that
291 these women have analyzed the risks and benefits of continual contraception and
292 that they do not perceive it to be to their benefit to use a continuous contraceptive

293 method. Given the low incidence of pregnancy, and the high percentage of
294 terminations in the presence of pregnancy, it may also be that this group of
295 women view abortion as a viable solution to an unplanned pregnancy. This is a
296 bit surprising with the reported religious affiliations of these clients. Half of the
297 clients who reported religious affiliations indicated Catholicism as their religion.
298 This may have bearing on their declination of contraceptives, but does not explain
299 the high proportion of abortions.

300 The conceptual framework of this study is relevant to the baseline level of
301 self-efficacy of the clients in question. Their level of self-efficacy suggests that
302 particular interventions related to recommendations for the enhancement of self-
303 efficacy in the client may be needed. It is integral that individuals have
304 confidence in their ability to contracept. The use of interventions based in self-
305 efficacy ensures that knowledge will be transmitted and that the client will gain
306 the confidence needed to integrate the feelings of self-efficacy and abilities to
307 control sexual and contraceptive situations. Albert Bandura (1986) the father of
308 self-efficacy says, "Competent functioning requires both skills and self-beliefs of
309 efficacy to use them effectively" (p. 391).

310 Limitations

311 Young women become sexually active at various ages. Their sense of
312 reproductive responsibility also develops at various ages. This study was limited

313 to clients who were at least 18 years old. The results of this study are specific to
314 this population, and may not be generalized to clients less than 18 years of age.
315 A significant number of Planned Parenthood clients are Spanish speaking.
316 The CSE tool was not translated into Spanish for this study. The results will be
317 generalizable only to English speaking women requesting EC. Because of the
318 possible cultural differences in the Hispanic population, study results from an
319 English-speaking population will provide guidelines for further studies of
320 culturally diverse populations.
321 The descriptive data analysis from this study revealed many interesting
322 phenomena. No correlations or tests of significance were performed.

323 Research Implications

324 The results of this study point to further research needed in assessing the
325 perceived barriers to contraception in clients utilizing EC. Given their high level
326 of CSE and perceived ability to control sexual situations it seems as though
327 women would be eager consumers of knowledge regarding contraceptive options.
328 Further studies on this population with regard to specific perceived side effects of
329 continual contraception would also be helpful to providers. Analysis of possible
330 reasons for the lower CSE scores related to conscious acceptance of sexual
331 activity may also provide insight.

332 Practice Implications

333 Women who are utilizing EC require special attention. Interactions with
334 these women should assess the clients perceived barriers to contraception and
335 mutual brainstorming of possible methods that would be appropriate given the
336 client's individual needs. These women are at risk for pregnancy given their
337 frequency of intercourse and lack of contraceptive use. It is important to
338 acknowledge the client's concerns and identify contraceptives that are appropriate
339 for the specific client situation. Given the fact that these clients have utilized
340 multiple contraceptive methods in the past, it may be possible to have a more in
341 depth discussion of particular methods in comparison with one another. Self-
342 efficacy should be reinforced during interactions with these clients, but does not
343 necessarily require interventions aimed at increasing self-efficacy. Providers
344 should assess clients' conscious acceptance of sexual activity in order to promote
345 self-efficacy in this area that showed lower scores in the factor analysis. An
346 appeal to the previous experiences of the client will also aid in the adoption of
347 continual contraception.

348 Conclusion

349 There is minimal published information regarding the characteristics of
350 women utilizing EC. Analysis of the mental characteristics of the client utilizing
351 EC is essential to the development of evidence-based practice. EC is suggested
352 for use to prevent pregnancy, in the instance of a failure of a (barrier)
353 contraceptive method, or if no contraception is utilized at the time of intercourse,

354 when pregnancy is not desired. The analysis of the results from the contraceptive
355 self-efficacy scale with clients requesting EC shows that these women have a high
356 level of perceived ability to control sexual and contraceptive situations and raises
357 the issue about why they are not using continual contraception. Findings from
358 this study may help to guide assessments and interventions of these clients to
359 promote optimal contraception.

360 Two major areas for assessment and intervention are (a) client reported
361 side effects of continuous contraception and (b) increasing the client's conscious
362 acceptance of sexual activity. Methods of assessment and intervention with the
363 client requesting emergency contraception may help to promote optimal
364 contraceptive utilization and ultimately the prevention of unwanted pregnancies,
365 and appropriate timing of desired pregnancies.
366

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401

401 Table 1.

402 Demographic Variables

| Characteristic | Range | Mean | SD |
|---|---|---|---|
| Age (years) | 18-29 | 21 | 2.71 |
| Age at first intercourse | 13-22 | 17 | 1.91 |
| Ethnicity | n | % | |
| Caucasian | 21 | 38.2 | |
| Hispanic | 18 | 32.7 | |
| Asian | 8 | 14.5 | |
| Filipino | 4 | 7.3 | |
| African American | 2 | 3.6 | |
| Religion | n | % | |
| Catholic | 21 | 38.2 | |
| Christian | 21 | 38.2 | |
| Christian Science | 1 | 1.8 | |
| Education | n | % | |
| College | 43 | 78.2 | |
| High School | 2 | 3.6 | |

403

403 Table 2.

404 Contraceptive Practices

| Current Birth Control Method | n | % |
|---|---|---|
| None | 12 | 21.8 |
| Condoms Only | 27 | 49.1 |
| Condoms and Pills | 9 | 16.4 |
| Pills | 5 | 9.1 |
| Depo | 1 | 1.8 |
| Ring | 1 | 1.8 |
| Past Birth Control Method | | |
| None | 1 | 1.8 |
| Condoms only | 16 | 29.1 |
| Pills only | 2 | 3.6 |
| Depo only | 3 | 5.5 |
| Condoms/Pills | 20 | 36.4 |
| Pills/Patch | 1 | 1.8 |
| Condoms/Pills/Patch | 6 | 10.9 |
| Condoms/Pills/Depo | 2 | 3.6 |
| Condoms/Pills/Patch/Depo | 2 | 3.6 |
| Condoms/Pills/Patch/Ring | 1 | 1.8 |
| IUD | 1 | 1.8 |
| How long since last on Birth Control Method | | |
| Never | 1 | 1.8 |
| Currently on BCM | 22 | 40.0 |
| 0-6 months | 17 | 30.9 |
| 6-12 months | 1 | 1.8 |
| >1 year | 5 | 9.1 |
| >2 years | 8 | 14.5 |
| Barriers to Birth Control | | |
| Side Effects | 28 | 50.9 |
| Cost | 8 | 14.5 |
| Availability | 7 | 12.7 |
| Parents | 2 | 3.6 |
| Minimal Sexual Activity | 2 | 3.6 |

405

405 Table 3.

406 EC Practices

| Frequency of EC use in the last year | n | % |
|---|---|---|
| 0 | 22 | 40.0 |
| 1 | 16 | 29.1 |
| 2 | 12 | 21.8 |
| 3 | 4 | 7.3 |
| 4 | 1 | 1.8 |
| Elapsed time from unprotected intercourse | | |
| <24 | 28 | 50.1 |
| 24-48 | 16 | 29.1 |
| 48-72 | 7 | 12.7 |
| 98-120 | 1 | 1.8 |
| >120 | 2 | 3.6 |

407

407 Table 4.

408 Coital and Pregnancy Practices

| Monthly frequency of sexual intercourse | n | % |
|---|---|---|
| 0-1 | 7 | 12.7 |
| 2-3 | 16 | 29.1 |
| 4-8 | 14 | 25.5 |
| >8 | 18 | 32.7 |
| Pregnancy History | | |
| Never Pregnant | 43 | 78.2 |
| Ever Pregnant | 12 | 21.8 |
| Ever Baby | 4 | 7.1 |
| Ever Abortion | 10 | 18.2 |
| Ever Miscarriage | 1 | 1.8 |

409

410

410 Table 5

411 CSE Factor Analysis

| Factor | Item # | San Jose | Sunnyvale | Montreal | College |
|---|---|---|---|---|---|
| Conscious acceptance of sexual activity | $2_a$ | 2.24 | 3.99 | 1.86 | 2.02 |
| | $5_a$ | 2.09 | 3.71 | 1.95 | 2.07 |
| | $6_a$ | 2.04 | 4.23 | 1.93 | 2.10 |
| | $12_a$ | 2.31 | 3.41 | 1.66 | 2.37 |
| | $14_a$ | 1.65 | 4.18 | 1.45 | 1.55 |
| | $15_a$ | 1.40 | 4.42 | 1.34 | 1.32 |
| Assumption of responsibility for sexual activity and contraception | 1 | 4.27 | 3.57 | 3.45 | 3.69 |
| | 13a | 4.67 | 4.17 | 3.92 | 4.41 |
| | 13b | 4.02 | 3.74 | 4.02 | 3.97 |
| | 13c | 4.67 | 4.40 | 4.20 | 3.49 |
| Assertiveness in preventing sexual intercourse | 4 | 4.47 | 3.98 | 3.57 | 4.00 |
| | 7 | 4.16 | 3.78 | 3.16 | 3.99 |
| | 13d | 4.22 | 3.55 | 2.91 | 4.01 |
| Strong feelings of sexual arousal | 3 | 4.42 | 4.39 | 4.31 | 4.47 |
| | $8_{ab}$ | 3.11 | 2.88 | 2.10 | 2.18 |
| | $9_a$ | 1.40 | 4.57 | 1.74 | 1.64 |
| | 10 | 3.31 | 2.98 | 2.90 | 2.80 |
| | $11_a$ | 1.67 | 4.42 | 1.44 | 1.70 |

412

413 *Note*. Highlighted scores indicate greatest level of self-efficacy

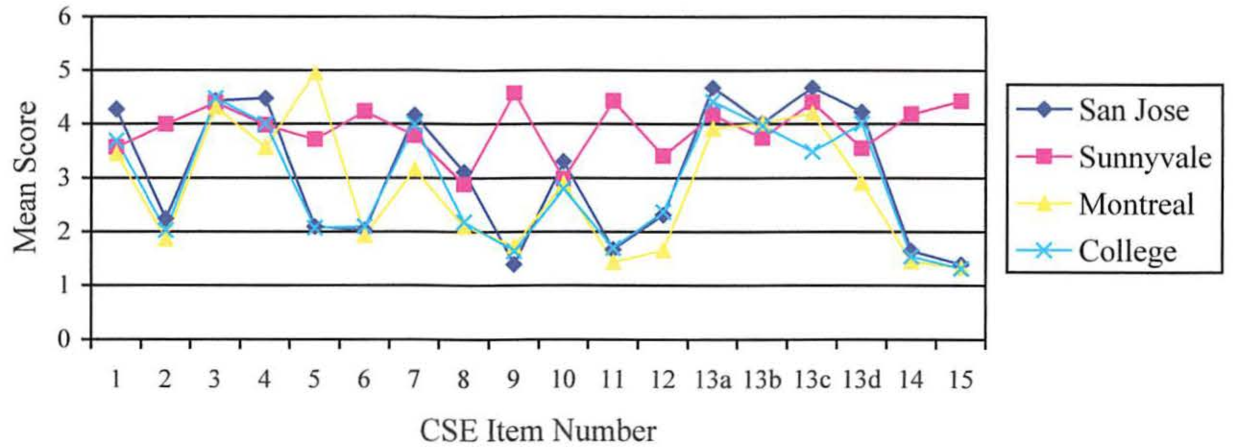
414 [a]Indicates reverse scored items.

415 [b]Indicates item with consistent predictability of contraceptive behavior

416

416

Figure 1. CSE Mean Score Comparison




417
418

419

419 Figure Caption

420 Figure 1. Item numbers 2, 5, 6, 8, 9, 11, 12, 14, 15 are reverse scored with lower

421 values indicating higher CSE

422

422 Appendix

423 Perceived Sexual/Reproductive Control: Contraceptive Self-Efficacy Tool

424 The items following are a list of statements. Please rate each item on a 1 to 5
425 scale according to how true the statement is of you. Using the scale, circle one
426 number for each question:
427 **1** = Not at all true of me
428 **2** = Slightly true of me
429 **3** = Somewhat true of me
430 **4** = Mostly true of me
431 **5** = Completely true of me
432
433 1) **1 2 3 4 5** When I am with a boyfriend, I feel that I can always be responsible
434 for what happens sexually with him.
435
436 2) **1 2 3 4 5** Even if a boyfriend can talk about sex, I can't tell a man how I really
437 feel about sexual things.
438
439 3) **1 2 3 4 5** When I have sex, I can enjoy it as something that I really wanted to
440 do.
441
442 4) **1 2 3 4 5** If my boyfriend and I are getting "turned on" sexually and I do not
443 really want to have sexual intercourse (go all the way, get down), I can easily tell
444 him "No" and mean it.
445
446 5) **1 2 3 4 5** If my boyfriend didn't talk about the sex that was happening between
447 us, I couldn't either.
448
449 6) **1 2 3 4 5** When I think about what having sex means, I can't have sex so easily.
450
451 7) **1 2 3 4 5** If my boyfriend and I are getting "turned on" sexually and I don't
452 really want to have sexual intercourse (go all of the way, get down), I can easily
453 stop things so that we don't have intercourse.
454
455 8) **1 2 3 4 5** There are times when I'd be so involved sexually or emotionally that I
456 could have intercourse even if I weren't protected (using a form of birth control)
457
458 9) **1 2 3 4 5** Sometimes I just go along with what my date wants to do sexually
459 because I don't think that I can take the hassle of saying what I want.
460

461 10) **1 2 3 4 5** If there were a man (boyfriend) to whom I was very attracted
462 physically and emotionally, I could feel comfortable telling that I wanted to have
463 sex with him.
464
465 11) **1 2 3 4 5** I couldn't continue to use a birth control method if I thought that my
466 parents might find out.
467
468 12) **1 2 3 4 5** It would be hard for me to go the drugstore and ask for foam (Encare
469 Ovals, a diaphragm, a pill prescription, ect,) without feeling embarrassed.
470
471 13) If my boyfriend and I were getting really heavy into sex and moving towards
472 intercourse and I wasn't protected . . .
473 A) **1 2 3 4 5** I could easily ask him if he had protection (or tell him that I
474 didn't).
475 B) **1 2 3 4 5** I could excuse myself to put in a diaphragm or foam (if I used
476 them for birth control).
477 C) **1 2 3 4 5** I could tell him I was on the pill or had an IUD (if I used them
478 for birth control).
479 D) **1 2 3 4 5** I could stop things before intercourse, if I couldn't bring up
480 the subject of protection.
481
482 14) **1 2 3 4 5** There are times when I should talk to my boyfriend about using
483 contraceptives, but I can't seem to do it in the situation.
484
485 15) **1 2 3 4 5** Sometimes I end up having sex with a boyfriend because I can't find
486 a way to stop it.
487
488
489 *Note:* The CSE scale was previously published in "Contraceptive Self-Efficacy:
490 A perspective on teenage girls' contraceptive behavior" by R. A. Levinson
491 (1986). Journal of Sex Research, 22, 351.

492 **Age: _______ Race:____________Religion:_________**

493

494 **Occupation:__________Student: (circle one) High School College N/A**

495

496 **1) What Birth Control method are you currently using?**

497 None Condoms Pills Patch Ring IUD Other _______________

498 **2) What Birth Control methods have you used in the past? (Circle all that**

499 **apply)**

500 None Condoms Pills Patch Ring IUD Other_______________

501 **3) How long has it been since you were using a method?**

502 I am currently on a method 0-6 months 6-12 months >1 yr >2 yrs

503 **4) How many times have you used EC (emergency contraception) in the past**

504 **12 months?**

505 0 1 2 3 4 5 >5

506 **5) How long has it been since your last unprotected intercourse?**

507 <24 hrs 24-48 hrs 48-72 hrs 72-96 hrs 98-120 hrs >120 hrs

508 **6) At what age did you first have sexual intercourse? ________________**

509 **7) How often do you have sexual intercourse?**

510 0-1 times/month 2-3 times/month 4-8times/month >8 times/month

511 **8) What barriers do you feel keep you from using a birth control method?**

512 Cost Side Effects Availability of method Other _____________

513 **9) Have you ever been pregnant? Yes No**

514 Live Births_______ Abortions________Miscarriages_________