In this study of homosexuality the following variables were tested: (1) acceptance of others, (2) faith in others, and (3) levels of masculinity and femininity (M-F). The subjects were 11th and 12th graders enrolled in a suburban high school (n=68). Three standardized measurement instruments, each designed to measure one of the above-mentioned variables, were used. The objective was to determine whether a health education unit on homosexuality would significantly influence any of the three study variables. Results indicated that neither the unit on homosexuality nor the health education class, in and of themselves, affected the variables. It was concluded that, though a short unit on homosexuality might not be expected to improve faith in people or acceptance of others, such a unit would not negatively affect gender and/or sexual identity. Further, students perceived the unit to be informative, interesting, and valuable. (Author/BV)
A STUDY OF PERSONALITY CHANGE
ASSOCIATED WITH THE CONDUCTING
OF A HIGH SCHOOL UNIT ON
HOMOSEXUALITY

By

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A STUDY OF PERSONALITY CHANGE ASSOCIATED
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Aided by the notoriety of Masters and Johnson's research (1966) and references to a sexual revolution, human sexuality has become a topic recently much discussed and researched. In fact, sexuality has achieved the status where one's sexual problems can be freely discussed with strangers via a telephone hot-line (Trecker, 1971). Such forms of responding to sexual problems as hot-lines seem to indicate a discomfort with sexuality or misconceptions pertaining to sex. Welbourne states there are

... a lot of people who feel very guilty or very anxious about sex because they are misinformed. They're living with a lot of delusions or myths. And their feelings can often be alleviated just by providing them with information about sex (Trecker, 1971).

An inspection of sources of sex information indicates that primary sources do not appear to be reliable. Thornburg in two studies of sources of sex information found that a majority of sex information possessed by college women was obtained from peers and literature, whereas only 15 percent of such information was acquired from schools and 21 percent from parents (Thornburg, 1970, 1972). Thornburg's findings are consistent with those of other researchers (Angelino and Mech, 1955; Angelino, et al., 1953; Lee, 1952).

One response to the misinformed and ill-at-ease relative to sexuality has been the development of school sex education programs. Though some school districts are experiencing problems with these programs (Libby, 1970),
As a parent I want my child's school to have a sex education program (83.8%).

Sex education should be offered in the schools (88.4%).

While only a small percentage agree that

The teaching of sex education in schools will destroy the morals of children (4.6%).

Sex education should be given only in the home (4.3%).

Sex education in the schools is an invasion of family rights and privacy (6.4%).

Most parents are capable of teaching their children about sex education (16.6%).

(Levin, et al., 1972)

A study of school administrators' attitudes toward sex education conducted in Texas is, I think, indicative of administrators' attitudes elsewhere in the United States. A majority of Texas school district superintendents perceived that the public school should assume the responsibility for educating their students about sexuality (Holcomb, Garner, and Beaty, 1970). These superintendents' attitudes seem to make sense when it is realized that students in one study indicating "the school as their major source of (sex) information demonstrated a significantly higher degree of knowledge about sexuality than those students who listed parents or friends as the major source of information (Jarren and St. Pierre, 1973)."

However, even though a school might offer a sex education program, there tend to be a certain "taboo" topics which cause a furor amongst parents and school administrators. One such topic is homosexuality. The recent visit of two homosexuals to a high school senior health education class in Fredonia,
New York resulted in irate parents and befuddled school personnel (Buffalo Evening News, 1972). This attitude toward homosexuality has persisted in spite of the militant homosexual movement (Newsweek, 1971).

With an unrealistic fear of parental attitudes toward sex education in general and homosexuality in particular, school personnel have been reluctant to have their sex education programs scrutinized objectively by "outsiders." Research findings, therefore, pertaining to evaluation of such programs are few, and this researcher could find no such reports pertaining to units on homosexuality. Since a unit on homosexuality is one which concerns itself with a minority life-style, it seems appropriate for such units to, in addition to teaching cognition relative to homosexuality, "open people up" to the point of realizing many decisions in life are made from several options, many of which are voluntarily chosen; and others involuntarily. To accept others and what they decide their life style should be for them, and to develop faith in others through an understanding of them rather than a fear developed from misconceptions, seem to be worthwhile outcomes associated with teaching units on homosexuality. These variables were tested for in this study, as well as levels of masculinity and femininity to test parental concern that children might change their sexual and/or gender identity as a result of studying homosexuality. The following hypotheses, presented in null form, were therefore formulated:

\[ H_1: \text{No significant difference exists in acceptance of others and faith in people between students to whom a unit on homosexuality is taught, students in a health education class to whom a unit on homosexuality is not taught, and students who are taught neither health education nor a unit on homosexuality.} \]

\[ H_2: \text{No significant difference exists in acceptance of others and faith in people for the interaction of sex and treatment.} \]
H: No significant difference exists in masculinity of femininity by treatment, sex, or their interaction.

PROCEDURES

Subjects: The subjects in this study were 38 eleventh graders and 30 twelfth graders enrolled as students in a suburban high school outside of Buffalo, New York. Of the 68 subjects, 49 were female and 19 were male with a mean age of 16.4. Twenty-six subjects in a health education class were presented the unit on homosexuality, 24 subjects in another health education class were not presented the unit on homosexuality, and eighteen subjects were not yet enrolled in health education nor presented the unit on homosexuality. All subjects completed pre-and post-test instruments. The assignment of students to each group was random and a cross-section of the school population was represented within each of these independent variables. As can be seen, to account for the effect of being enrolled in health education, two control groups were selected--the no unit, but health education group and the no unit, no health education group.

Instruments: The three dependent variables measured were faith in people, acceptance of others, and masculinity-femininity. All measured instruments employed had been previously validated and demonstrated to be reliable. To measure faith in people, Rosenberg's *Faith in People Scale* (1957) was used; to measure acceptance of others, Rey's *Acceptance of Others* (1955) scale was employed; and the masculinity-femininity scale of the *Omnibus Personality Inventory* (Heist and Yonge, 1968) determined levels of masculinity and femininity. The possible ranges for these scales, with higher scores representing higher amounts of the variables on the first two and more masculinity
on the last, are Faith in People Scale (FIP), 0-5; Acceptance of Others (A00), 20-100; and masculinity-femininity (M-F), 0-56.

Since masculinity and femininity are topics and definitions presently under debate in our society, it seemed prudent to isolate the results on that instrument and determine whether, in fact, differences existed between males and females. That is, did the M-F scale differentiate between males and females? The results of that analysis indicated a statistically significant difference between males and females at the .001 level of significance (F=90.81, df=1) with males scoring higher than females. In fact, 57 per cent of the variance accounted for was a function of sex. It was therefore decided that the M-F scale of the Omnibus Personality Inventory was an appropriate instrument to use in measuring levels of masculinity and femininity.

The Treatment: The unit on homosexuality consisted of varied learning experiences. There were values clarification activities related to homosexuality, short lectures, a debate, and guest speakers as part of the unit. The short lectures involved presentation of research findings and history pertaining to homosexuality, as well as a discussion of types of homosexuals. The debate revolved about the question: Should homosexuals be treated and changed, or should society accept them as is? Two guest speakers participated in the instruction: a captain of the City of Buffalo Vice Squad and an endocrinologist-researcher.

It also seemed desirable to hear from homosexuals themselves. However, the school administration thought it imprudent to invite homosexuals to class or to videotape a conversation with them. It was agreed, though, that an audio tape recording presenting opinions of and by homosexuals would be possible. Two male homosexual members of the Buffalo area Mattachine Society.
developed such a recording and it was played as part of the unit. It seems worth reporting that only one parent complained about the playing of the tape recording, and that parent criticized the prohibition of an actual visit to the class by the homosexuals.

The group enrolled in health education but not offered the unit on homosexuality was presented another health related unit on personality; and the group neither offered health education nor the unit were either in study halls or in other classes when the unit was being conducted.

Analysis of the Data: Various procedures were employed to analyze the data. Hypotheses 1 and 2 were tested with a two-way fixed-effects bivariate analysis of covariance with unequal subclass sizes. Hypothesis 3 was analyzed via a two-way fixed-effects univariate analysis of covariance with unequal subclass sizes. Prior to both analyses of covariance, the hypotheses of no association between post-tests and pre-tests were tested to determine the appropriateness of the statistical model employed to test the research hypotheses. Other tools such as correlational techniques were also utilized when desirable.

RESULTS

As can be seen in Table I, although the post-test means for Faith in People and Acceptance of Others were larger than the pre-test means, the real differences in pre and post measures were quite small.

(INSERT TABLE I)

While Table I divides the study population by sex for each measure, Table II further divides the group by treatment. It should be noted that there were only two male subjects in the T₃ group (no unit, no health educa-
## TABLE I

MEANS, RANGES, AND STANDARD DEVIATIONS ON THE THREE PERSONALITY MEASURES

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>Range</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIPPRE:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.58</td>
<td>1-5</td>
<td>1.09</td>
</tr>
<tr>
<td>Female</td>
<td>2.51</td>
<td>0-4</td>
<td>1.03</td>
</tr>
<tr>
<td>Total</td>
<td>2.53</td>
<td>0-5</td>
<td>1.05</td>
</tr>
<tr>
<td>FIPPOS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.42</td>
<td>0-4</td>
<td>.99</td>
</tr>
<tr>
<td>Female</td>
<td>2.80</td>
<td>0-5</td>
<td>1.37</td>
</tr>
<tr>
<td>Total</td>
<td>2.69</td>
<td>0-5</td>
<td>1.29</td>
</tr>
<tr>
<td>AOOPRE:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>61.00</td>
<td>46-74</td>
<td>7.17</td>
</tr>
<tr>
<td>Female</td>
<td>62.73</td>
<td>42-83</td>
<td>8.93</td>
</tr>
<tr>
<td>Total</td>
<td>62.28</td>
<td>42-83</td>
<td>8.51</td>
</tr>
<tr>
<td>AOOPOS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>59.68</td>
<td>43-78</td>
<td>9.27</td>
</tr>
<tr>
<td>Female</td>
<td>63.31</td>
<td>34-88</td>
<td>9.89</td>
</tr>
<tr>
<td>Total</td>
<td>62.29</td>
<td>34-88</td>
<td>9.86</td>
</tr>
<tr>
<td>M-FPRE:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35.68</td>
<td>27-41</td>
<td>3.96</td>
</tr>
<tr>
<td>Female</td>
<td>23.82</td>
<td>14-33</td>
<td>4.75</td>
</tr>
<tr>
<td>Total</td>
<td>27.13</td>
<td>14-41</td>
<td>7.00</td>
</tr>
<tr>
<td>M-FPOS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34.84</td>
<td>27-42</td>
<td>4.00</td>
</tr>
<tr>
<td>Female</td>
<td>24.10</td>
<td>15-35</td>
<td>5.44</td>
</tr>
<tr>
<td>Total</td>
<td>27.10</td>
<td>15-42</td>
<td>7.00</td>
</tr>
</tbody>
</table>
tion) and therefore the results from that cell should be viewed with its size in mind.

**INSERT TABLE II**

Since it was anticipated that Faith in People (FIP) and Acceptance of Others (A00) would increase and masculinity-femininity (M-F) level not change, FIP and A00 were looked at separately from M-F. Prior to analyzing hypotheses 1 and 2, a bivariate analysis of variance test of no association between post- and pre-test measure for both FIP and A00 resulted in significance at the .001 level, thereby indicating that post- and pre-tests were measuring the same variables and allowing for the use of a bivariate analysis of covariance for testing these hypotheses. Table III depicts the results of the two-way fixed-effects bivariate analysis of covariance used to test hypotheses 1 and 2.

**INSERT TABLE III**

As noted in Table III, none of the F statistics proved to be significant at the .05 level thereby not allowing for a rejection of hypotheses 1 and 2. It was therefore concluded that neither the unit on homosexuality nor the health education class itself effected faith in people or acceptance of others.

To be able to test hypothesis 3, the effect of the treatment upon level of masculinity or femininity, a univariate test of no association between post- and pre-tests of M-F was conducted. The results of this test indicated a rejection of no association between pre- and post measures F=41.43, df=1/61, p .001) thereby allowing for the testing of hypothesis 3 by employing a two-way fixed-effects univariate analysis of covariance. As can be seen in Table IV, there was found to be no difference in M-F as a result of the unit on
# TABLE II

**Estimated Means, Pooled Within Group Standard Deviations, and Pooled Within Correlation Matrix for a Pre- and Post-Battery of Three Personality Measures for the Homosexuality Unit Study Population, n=68**

<table>
<thead>
<tr>
<th>Measures a</th>
<th>T1 F</th>
<th>T2 F</th>
<th>T3 F</th>
<th>Pooled Within Group Std. Dev.</th>
<th>FIPPOS</th>
<th>AOOPOS</th>
<th>FIPPRE</th>
<th>AAOPO</th>
<th>M-FROS</th>
<th>M-FPRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIPPOS</td>
<td>2.33</td>
<td>2.31</td>
<td>2.86</td>
<td>3.12</td>
<td>1.50</td>
<td>2.94</td>
<td>1.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AOOPOS</td>
<td>57.33</td>
<td>59.06</td>
<td>62.57</td>
<td>64.65</td>
<td>61.50</td>
<td>66.13</td>
<td>9.72</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIPPRE</td>
<td>2.19</td>
<td>2.25</td>
<td>3.00</td>
<td>2.65</td>
<td>3.50</td>
<td>2.63</td>
<td>1.05</td>
<td>.65</td>
<td>.23</td>
<td>1.00</td>
</tr>
<tr>
<td>AAOPO</td>
<td>50.80</td>
<td>58.06</td>
<td>62.29</td>
<td>64.18</td>
<td>57.50</td>
<td>56.00</td>
<td>8.32</td>
<td>.29</td>
<td>.75</td>
<td>.26</td>
</tr>
<tr>
<td>T1-FPOS</td>
<td>34.70</td>
<td>23.56</td>
<td>34.29</td>
<td>24.59</td>
<td>37.50</td>
<td>24.13</td>
<td>5.29</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>T1-FPRE</td>
<td>33.90</td>
<td>24.56</td>
<td>34.86</td>
<td>23.55</td>
<td>37.50</td>
<td>23.25</td>
<td>4.71</td>
<td>.64</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

\[a\] FIPPOS = Faith in People Post-test  
AOOPSO = Acceptance of Others Post-test  
FIPPRE = Faith in People Pre-test  
AOOPRE = Acceptance of Others Pre-test  
M-FPOS = Masculinity-Feminity Post-test  
M-FPRE = Masculinity-Feminity Pre-test

\[b\] T1 = Homosexuality unit group  
T2 = Health Education but no homosexuality unit group  
T3 = No health education nor homosexuality unit group
### TABLE III

**BIVARIATE ANALYSIS OF COVARIANCE FOR TREATMENT, SEX, AND THEIR INTERACTION**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>df</th>
<th>Univariate F</th>
<th>FIP</th>
<th>AOO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>4/118</td>
<td>.52*</td>
<td>2/60</td>
<td>2.53*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>2/59</td>
<td>1.36</td>
<td>1/60</td>
<td>.66</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>4/118</td>
<td>2.31</td>
<td>2/60</td>
<td>2.64</td>
<td>.76</td>
<td></td>
</tr>
</tbody>
</table>

*aFIP = Faith in People
bAO0 = Acceptance of Others
*cNone of the F statistics in this table were significant at the .05 level.

### TABLE IV

**UNIVARIATE ANALYSIS OF COVARIANCE FOR MASCULINITY-FEMINITY BY TREATMENT, SEX, AND THEIR INTERACTION**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>26.04</td>
<td>13.02</td>
<td>.77</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>36.70</td>
<td>36.70</td>
<td>2.17</td>
</tr>
<tr>
<td>Interaction</td>
<td>2</td>
<td>5.08</td>
<td>2.94</td>
<td>.17</td>
</tr>
<tr>
<td>Within</td>
<td>61</td>
<td>1031.51</td>
<td>16.91</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>1100.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*None of the F statistics in this table were significant at the .05 level.*
Students in T were asked to indicate their reactions, in writing, to the homosexuality unit they were presented. These reactions indicated satisfaction with the unit and an appreciation for having been exposed to such learning experiences. A sample of these reactions, indicative of the general class consensus, are presented below:

I thought it was interesting and informative.

I thought it was worthwhile and I learned a few things from it that I didn't already know.

It was one of the more interesting units of the class.

I think it was different; it was a topic I never really thought(sic) or talked about. I(sic) made me more aware of people; how much homosexuality there really is.

I liked it and I think it should be taught in every health class.

Relative to perceived changes in attitude and knowledge regarding homosexuality, some reactions of T students were:

I think the unit helped me to better understand and accept the homosexual.

I think it has made me "think before I speak (or judge)", and has made me more understanding and tolerant of others.

I thought it was good and that it helped me to understand homosexuals and their life style a little better.

I thought it was interesting and that it helped clear up some of the misconceptions we had about homosexuality.
Yes, I've realized that homosexuality is an alternate life style rather than a sickness.
This gave me a chance to see all the angles of homosexuality and let me choose my own opinion about it.

DISCUSSION

As a result of the analysis of the data, it was found that the unit on homosexuality effected neither faith in people, acceptance of others, nor levels of masculinity and femininity. There were no significant changes on any of these dependent variables. While this researcher would have liked to have been able to report greater faith in people and acceptance of others on the part of high school students as a result of studying a different life style (homosexuality), the fact that a unit offered forty minutes per school day for 3 weeks did not improve these variables is not surprising. Whether faith in people or acceptance of others would improve if this unit were taught for a longer period of time or to a younger student (e.g., junior high school age) are questions worthy of further investigation.

That H-F measures remained constant was seen to be a finding in support of advocates for the inclusion of units on homosexuality in school health education programs. Parental concern about the effect of such units on the sexual or gender identity of their children seem to be unwarranted. As with the other dependent variables (FIP and A00), a study of longer duration and with younger children seems needed to further define the relationship, or lack of such, of units on homosexuality to levels of masculinity and femininity.

Lastly, it was concluded that the students who participated in the unit on homosexuality perceived this unit to be both interesting and informative, and felt that their attitudes toward different styles (homosexuality, in particular) became somewhat more open. This last finding seems important to keep
in mind when health and/or sex educators plan curricula for senior high school students.

REFERENCES


