Previous research has established the existence of a differential in self-esteem between males and females. This difference is explained in terms of socialization experiences which favor the masculine role. On this basis, it was predicted that male subjects would display higher self-esteem than females in a simulated society game in which subjective evaluations were made of perceived worth. The results provided support for this prediction, which remained in effect when controls were introduced for age, health, race, religiosity, and marital status. However, skill attainment proved to be an important intervening variable; females possessing certain instrumental skills were as likely as males to display high self-esteem. The discussion suggests that skill attainment may be an important aspect of socialization accounting for gender differences in self-esteem. References and tables are included. (Author)
THE INFLUENCE OF GENDER DIFFERENCE ON PERCEPTIONS OF SELF-ESTEEM: AN UNOBTUSIVE MEASURE*

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*This is a revised version of a paper presented at the Southwestern Sociological Association meetings, March 31, 1977.
Self-esteem, found at the core of many social psychological issues, involves a subjective evaluation of who people think they are and their perceived possession of unique attributes. Recent research has firmly established that, in general, men in our society enjoy higher degrees of self-esteem than do women.

McKee and Sheriffs (1957) were among the first to note this difference through systematic research in their work involving self-descriptions; consistently, women provided less favorable descriptions of themselves than did men on personality inventories. More recent research has expanded this early finding by discovering that women tend to devalue their abilities and skills relative to men. Both Feather (1969) and Crandell (1969) report research indicating that men are more likely than women to display higher expectancies of success on a variety of tasks involving both manual and intellectual skills. Other researchers reinforce this finding with results indicating that women have a tendency to attribute success in task performance to external variables (most often, luck) while men tend to indicate internal variables (skills and effort) as reasons for their success. Conversely, women tend to offer lack of skill or ability as reasons for failure, while men rationalize failure as the result of lack of effort or bad luck [cf. Deaux and Fesliller...
Several writers account for this self-esteem differential in terms of sex role socialization. In general, men are socialized into a role set enjoying a higher societal evaluation than that of women [cf. Tarvis and Offir (1977): 187-95; Chafetz (1974): 35-56]. Komarovsky (1946) noted quite early that, given societal expectations, women are often forced to conform to a role which stresses lack of intellectual development, dependence and incompetence, even if their actual attributes are quite contradictory to this role. Current studies have demonstrated that conformity to this expected feminine role may in itself be counterproductive to the development of a positive self-evaluation. These studies find that social attributes viewed as 'masculine' are more highly favored and valued than traits generally associated as "feminine" [Rosenkrantz and Vogel (1968); Sappenfield and Harris (1975)].

Regarding specific sex role attributes, Feather and Simon (1975) find that failure is often seen as a feminine characteristic that is expected of and even approved for women. Additional research provides evidence that expectations of failure may in fact become self-fulfilling prophecies: women may come to fear and unconsciously avoid success [Horner (1970); Breedlove and Cicirelli (1974); Monahan, et al. (1976)].

In view of the existing literature, it is hypothesized
that, given a situation in which people must evaluate their potential worth in a crisis situation, men will be more likely than women to have a positive evaluation of their perceived contributions. If the hypothesis is confirmed, it is the intention of this paper to explore the possibility that other dimensions of socialization, beyond a favorable societal evaluation of masculinity, might account for the difference in self-esteem.

OPERATIONALIZATION OF SELF-ESTEEM

The concept of self-esteem has intuitive appeal, especially in the classical social psychological theories of Cooley and Mead. However, it is a particularly difficult concept to operationalize.

A wide gambit exists for developing measures of self-esteem [cf. Wells and Marwell (1976): Chapter 5]. In regards to sex roles, these measures have included self-descriptions, personality inventories, evaluation of masculine and feminine characteristics, and predictions of success or rationalizations for failure at manual and intellectual tasks.

Various aspects of these measurements are incorporated into the present operationalization of self-esteem. This study attempts to develop an unobtrusive measure based on a simulated society game. As a part of the game, subjects indicate whether they possess personal qualities sufficient to justify their
survival in a crisis situation. The decision of the subjects provides a measure of self-esteem because individual attributes must be examined and subjective evaluations made of perceived personal worth. Considering that selection for survival constitutes a unique operationalization of the self-esteem concept, possible extraneous variables (most notably, age and health) must be controlled.

For purposes of labeling, a decision of survival was taken as an indication of high self-esteem while non-survival indicated low self-esteem.

METHODS

364 (147M, 217F) introductory sociology students at a Southern commuter university participated in a simulated society exercise entitled "Who Shall Survive." The game was administered early in the semester to avoid the possibility that later classroom discussions and readings regarding sex role issues might have altered opinions and orientations.

The game consisted of two phases. In the first phase, students were divided into groups ranging in size from 5 to 9, depending on the size of the class. Each member of the group was provided with a paper containing a short biography of 15 people (see Figure 1). The groups were told to assume that an atomic attack had occurred, and these 15 people had crowded into a bomb shelter. However, the shelter had supplies to support only 7 people for two weeks, the minimum amount

*To editors: This figure may be omitted at your discretion.
of time necessary for outside radiation levels to subside to a safe level. Therefore, 8 people had to be forced out of the shelter. Each group was charged with deciding which 8 people were to be forced out and which 7 would remain, and thus survive. Additionally, the students were told that, to the best of their knowledge, these could well be the only 7 people who survived the holocaust.

After each group had reached a decision, class discussions were held concerning their choices. Then, as a final phase of the game, the subjects were requested to construct an anonymous autobiography, using those on the instruction sheet as a model. This provided consistent information on such variables as sex, race, religiosity, health, marital status and skills. Finally, each subject indicated if he or she would choose themselves if they had appeared on the list.

The autobiographies were coded and cross-tabulated for dichotomies of self-esteem (selection for survival) vs. gender. The 2X2 tables were utilized in testing the stated hypothesis that men will display higher self-esteem than women. This thesis was further explored by controlling for various attributes in an attempt to discover any intervening variables.

Significance of the distribution or relationship was examined by using chi-square ($X^2$) corrected for lack of continuity by employing Yate's correction for 2X2 tables [cf. Blalock (1972): 285-6]. This correction deflates values
obtained for $X^2$, resulting in a more conservative estimate of the coefficient.

Since $X^2$ is not applicable for measurement of the strength of relationships due to its influence by table and sample size, an adjustment was utilized. Pearson's Contingency Coefficient $C = \left(\frac{X^2}{X^2 + N}\right)^{1/2}$ is used in the study to measure associations between self-esteem and gender, controlling for extraneous variables. Since this measure's maximum value is dependent on size of the cross-tabulation table, the maximum value (.707) is divided into the coefficient to correct for this artifact and obtain a comparative value with a range from 0 to 1.

FINDINGS

Consistent with existing research, males were found to display higher degrees of self-esteem. As indicated in Table 1, a significant relationship, as measured by the corrected contingency coefficient ($C = .27$), exists between self-esteem and gender ($X^2 = 12.28$, df = 1, p. = .0005).

Table 1 about here

Given the unique character of the measurement, controls were utilized for age and health to further isolate the self-esteem dimension. In addition, crosstabulations of self-esteem
and gender, controlling for race, marital status, religiosity, and possession of manual/technical skills were performed (see Table II).

Table II about here

Of the possible extraneous variables in Table II, only Race: Minority, which literally translated to "black" in the sample, and Skills: Manual/Technical significantly altered the uncontrolled relationship between self-esteem and gender (Table I). The lack of significance found for self-esteem vs. gender in the minority case may be explained by the higher self-esteem of the black female relative to her white counterpart, due to a historically more powerful and dominant role in the family [Gove and Lester (1974): Chafetz (1974): 54].

Although this finding is relevant, it is not particularly unique. The more interesting finding is the intervening effect of skill attainment on the sample. As presented in Table III, where cross-tabulations controlling for skills are reproduced, subjects with manual/technical skills show a relationship between self-esteem and gender that is relatively weak (C = .12) with a very high probability of chance variation (p = .593). When the sample consisting of subjects with no manual/technical skills is examined, a result similar to the relationship between self-esteem and gender is found to exist.
(C = .24, p = .007). This substantiates the important confounding effect between self-esteem and gender contributed to possession of manual/technical skills.

Table III about here

DISCUSSION AND CONCLUSIONS

Findings of this study further validate the existence of a self-esteem differential between genders. As discussed earlier, a portion of the differential may undoubtedly be attributed to cultural role definitions that favor masculinity in the socialization process.

However, there appears to be an important aspect of this socialization that may account for a substantial portion of the variance in self-esteem. This aspect may be viewed as having policy relevant implications in the attainment of psychological equality between the sexes.

As a rule, men, relative to women, are encouraged to develop skills, both mechanical and intellectual, that allow for a manipulation of, and hence, better adaptation to, their environment. Wolter, in Sex Roles and Social Structure (1970), terms these "instrumental" skills. In contrast, women are socialized to attain expressive (domestic and social) skills.
Instrumental activities are valued more highly than expressive ones especially in modern societies. The former are usually more amenable than the latter to measurement of success. The implication is that instrumental tasks lend themselves more than expressive ones to control, to the development of hierarchies of authority, and to the concentration of power. [Thus], differentiation by gender necessarily leads to a stratification according to which men have more power and prestige than women [Holter (1970):46-7].

Women in the sample undoubtedly possessed skills, but most were probably of an expressive variety and did not lend themselves to the development of self-confidence and/or high self-esteem.

On the other hand, those women reporting possession of instrumental skills were as likely as men in the sample to indicate that they were worthy of survival. In fact, they were more likely than men who did not report instrumental skills ($X^2 = 3.83$, significant at the .05 level).

The research suggests that one method of augmenting a psychological equality between the sexes is the attainment of instrumental skills by women. The likelihood of achieving this goal could be enhanced by the enactment of public policies which mandate that opportunities for development and utilization of these skills be made available.

Ideally, desired psychological equality could be attained by a more positive societal evaluation of expressive skills. Undoubtedly, men would have much to gain by developing
expressive abilities. As Sappenfield and Harris (1975) report, androgynous individuals possessing positive characteristics associated with both genders have a tendency to display high self-esteem. But the extensive resocialization required for this end may be accelerated by the more immediately obtainable goal of instrumental skills development among women.
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Pesenkrantz, Paul and Susan Vogel  

Sappenfield, Bert and Cynthia Harris  

Spence, Janet, Robert Helmreich and Joy Stapp  

Tarvis, Carol and Carole Offir  

Wells, L. and Gerald Harwell  
FIGURE I
"WHO SHOULD SURVIVE?"

The following 15 persons are in an atomic bomb shelter. An atomic attack has occurred and it will take two weeks for the external radiation level to drop to a point that life can be supported. However, only 7 people can be supported at a minimal level for these two weeks. It is the task of your group to decide who should survive.

1. Dr. Dane - 39, white, no religious affiliation, Ph.D. in history, college professor, good health, married, 1 child (Bobby), active and enjoys politics.

2. Mrs. Dane - 38, white, Jewish, BA and MA in psychology, counselor in mental health clinic, good health, married, 1 child (Bobby), active in community.

3. Bobby Dane - 10, white, Jewish, special education classes for 4 years, mentally retarded, good health, enjoys pets.

4. Mrs. Garcia - 33, prostitute, Mexican-American, Catholic, 9th grade education, cocktail waitress, good health, 1 child (Jean).

5. Jean Garcia - 3 weeks old, good health, nursing for food.

6. Mrs. Evans - 32, black, Protestant, MA in elementary education, teacher, divorced, 1 child (Mary), good health, cited as an outstanding teacher, enjoys working with children.

7. Mary Evans - 8, black Protestant, 3rd grade, good health, excellent student.

8. John Jacobs - 13, white, Protestant, 8th grade, honor student, very active, broad interests, good health, religious background.

9. Mr. Newton - 25, black, atheist, was starting last year of med school but suspended for suspected homosexual activity.

10. Mrs. Clark - 26, American Indian, college grad, electronics engineer, no children, good health, enjoys outdoor sports and stereo equipment, grew up on reservation, bitter about treatment there.

11. Sister Mary Kathleen - 27, nun, college grad, English major, good health, father a prominent businessman.

12. Mr. Black - 51, white, Mormon, high school education, mechanically minded (nicknamed "Mr. Fix-it"), married, 4 children (not with him), good health, enjoys outdoors and working in his shop.

13. Ms. Harris - 21, Mexican-American, Protestant, college senior, nursing major, good health, likes outdoors, enjoys people, active in feminist movement and activities.

14. Father Franz - 37, Catholic, criticized for liberal views, college grad plus seminary training, good health, former college athlete.

15. Dr. Gonzales - 66, Puerto Rican, Catholic, medical doctor, has had 2 heart attacks in past 5 years, but continues to practice medicine.
TABLE 1
CROSS TABULATION OF SELF-ESTEEM BY GENDER

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>71.4%</td>
<td>52.5%</td>
</tr>
<tr>
<td>low</td>
<td>28.6%</td>
<td>47.5%</td>
</tr>
<tr>
<td>totals</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

N = 147  N = 217  ΣN = 364

Corrected $X^2 = 12.28$, df = 1, p = .0005
Corrected Contingency Coefficient (C) = .27
TABLE II
SELF-ESTEEM BY GENDER CONTROLLED FOR EXTRANEOUS VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>N*</th>
<th>X²</th>
<th>df</th>
<th>level of significance</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>286</td>
<td>10.68</td>
<td>1</td>
<td>.001</td>
<td>.28</td>
</tr>
<tr>
<td>Minority</td>
<td>73</td>
<td>1.12</td>
<td>1</td>
<td>.284</td>
<td>.21</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>60</td>
<td>3.58</td>
<td>1</td>
<td>.058</td>
<td>.38</td>
</tr>
<tr>
<td>Non-married</td>
<td>101</td>
<td>4.29</td>
<td>1</td>
<td>.038</td>
<td>.32</td>
</tr>
<tr>
<td>Religion:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>263</td>
<td>3.43</td>
<td>1</td>
<td>.063</td>
<td>.17</td>
</tr>
<tr>
<td>Non-religious</td>
<td>101</td>
<td>9.23</td>
<td>1</td>
<td>.006</td>
<td>.44</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>312</td>
<td>6.98</td>
<td>1</td>
<td>.008</td>
<td>.22</td>
</tr>
<tr>
<td>Older</td>
<td>43</td>
<td>7.68</td>
<td>1</td>
<td>.006</td>
<td>.60</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>271</td>
<td>6.98</td>
<td>1</td>
<td>.008</td>
<td>.23</td>
</tr>
<tr>
<td>Bad</td>
<td>93</td>
<td>5.83</td>
<td>1</td>
<td>.016</td>
<td>.37</td>
</tr>
<tr>
<td>Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>272</td>
<td>7.22</td>
<td>1</td>
<td>.007</td>
<td>.24</td>
</tr>
<tr>
<td>Manual/Technical</td>
<td>92</td>
<td>0.29</td>
<td>1</td>
<td>.593</td>
<td>.12</td>
</tr>
</tbody>
</table>

*N = subjects reporting that attribute
### TABLE III
**SELF-ESTEEM BY GENDER CONTROLLED FOR SKILL**

#### [NO SKILL]

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>66.3%</td>
<td>48.3%</td>
</tr>
<tr>
<td>low</td>
<td>33.7%</td>
<td>51.7%</td>
</tr>
<tr>
<td>totals</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

N = 92

\[ \text{Corrected } X^2 = 7.22, \text{ df } = 1, \text{ p } = .007 \]

\[ \text{Corrected } C = .24 \]

#### [SKILL]

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>80.0%</td>
<td>73.0%</td>
</tr>
<tr>
<td>low</td>
<td>20.0%</td>
<td>27.0%</td>
</tr>
<tr>
<td>totals</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

N = 55

\[ \text{Corrected } X^2 = .285, \text{ df } = 1, \text{ p } = .593 \]

\[ \text{Corrected } C = .12 \]