

DOCUMENT RESUME

ED 067 997

HE 003 423

AUTHOR Rosenwood, Linda M.; Lunneborg, Patricia W.  
TITLE Women in Continuing Education.  
INSTITUTION Washington Univ., Seattle. Bureau of Testing.  
PUB DATE Aug 72  
NOTE 14p.

EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Adult Education; Career Planning; Changing Attitudes;  
Evaluation; \*Feminism; \*Higher Education; \*Student  
Attitudes; Student Characteristics; Testing; \*Womens  
Education; \*Womens Studies

ABSTRACT

This evaluative research project represents an attempt to assess the effects the University of Washington's women's continuing education program has upon participants. Brief instruments to measure self-image, attitudes toward women, problem-solving ability and career orientation were constructed and administered to registrants and nonregistrants who served as controls. The program's impact was limited to a significant rise in self-esteem. Methodological difficulties (low test reliability, small sample size, etc.) may account for the lack of other differences, but it is suggested that the program reconsider its goals and how to accomplish them more effectively. (Author/CS)

AI  
HE

ED 067997

HE 083 423

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY.

*Bureau of Testing*  
*University of Washington—Seattle*

FILMED FROM BEST AVAILABLE COPY

ED 067997

Bureau of Testing  
University of Washington

August 1972

Women in Continuing Education

Linda M. Rosenwood and Patricia W. Lunneborg

This evaluative research project was the first author's honors thesis in psychology. It represents an exploratory attempt to assess the kinds of effects the University's women's continuing education program has upon participants. Brief instruments to measure self-image, attitudes towards women, problem-solving ability, and career orientation were constructed and administered to spring quarter registrants and nonregistrants who served as controls. The program's impact was limited to a significant rise in self-esteem. Methodological difficulties (low test reliability, small sample size, etc.) may account for the lack of other differences, or the program itself may wish to reconsider goals and how to accomplish them more quickly and effectively.

Bureau of Testing Project: 237

## Women in Continuing Education

Linda M. Rosenwood and Patricia W. Lunneborg

There exists a group of middle-aged, middle-class, American women who are in the words of Gerald Self, "on the move." He describes this group as people who have a "vague lack of fulfillment, a void in their normal life pattern and, as a result, are seeking to make constructive changes in their life style" (Self, 1969). He came to study the psychological characteristics and conflicts of women making this change through the Continuum Center of a university. Women came to this center to participate in their "Investigations into Identity" program as a start to these changes. The University of Washington, where the present study was undertaken, has a similar program and presumably, so do many other institutions. At UW it is conducted under the auspices of the Office of Women Studies, Division of Continuing Education. Middle-aged women come here to seek changes in their lives by enrolling in classes with such titles as Exploration, Perspectives, Focus, and Vocational Search. This group of well-educated women (in the present sample mean education of 15 years) has turned to the university to help them meet their present needs, to help them make changes through education. Many of the children of these women are now in school or are adults, thus the group now has the time to look into long dormant career aspirations. The present study was undertaken to examine how effectively the university is meeting the needs of these women, and what changes, if any, these women are making by participation in these programs.

Four variables were examined that were hypothesized to be related to the women's search for a new career or activity outside the home. The first was self image which has been shown to be correlated with occupational interests (Korman, 1967). While it is generally considered that females have lower self-esteem than males, these women in particular, who have not tried out their full abilities in a competitive situation for some time, would be expected to have problems in this area. Self-image thus could be expected to influence vocational goals. Women who feel inadequate may maintain a balanced view of their self-perception by seeking not only low status occupations, but those requiring only low abilities (Korman, 1967). Failing any tasks tends to create a vicious circle leading to even lower self-image. But this progression does not need to take place. Career interest has been altered in relatively brief periods, for example, by exposure to one feminist speech designed to reduce home-career conflict (Farmer, 1970).

One hypothesized cause of a lower self image in females is attitudes toward women in general (Wylie, 1961). Women and men both view males as a group to be superior to females as a group. Rosenkrantz et al. (1968) found that both sexes describe women as having less favorable characteristics than men. Therefore, attitudes toward women was the second variable examined. The third was problem-solving. This has also been shown to be influenced by attitudes and also can be manipulated in women via attitude change (Carey, 1955). The final variable examined was career interest. This measure was designed to evaluate the relative importance of career goals in relation to other goals.

It was hypothesized that the women would show a change on all four measures after participating in the Continuing Education Classes. The hypothesis was that self image would be improved by the course, and that there would be a correlated change in attitudes towards women (primarily as a result of higher self image, but also because of the female administrators at the Women Studies Center serving as high status role models). That this higher self image would result in higher career interest and a gain in problem-solving ability was also hypothesized. These effects would result from their new confidence, and would demonstrate a behavioral (as opposed to attitudinal) change.

#### Method

Subjects. The subjects were 63 women, ranging in age from 24 to 57 with a mean of 41. They attended an orientation session held by the University of Washington Continuing Education Program. Of these 33 (52%) completed and returned the retest. Also tested and used as a norm group were 63 young women taking an introductory psychology course. Thirty-eight (60%) of this group returned the retest.

Instruments. A mini-battery consisting of four, short, written tests was used to measure the variables and assess any changes. The first test, the self image scale, was composed of twenty self-report items (e.g., I am a jolly person \_\_\_\_\_ of the time) taken from Jorgensen et al. (1969). The second scale measured attitudes toward women. It consisted of twenty-five multiple-choice and true-false items, with some adopted from a Psychology Today questionnaire and some composed by the investigators. The problem-solving task, making up the third test,

consisted of five data sufficiency items from the Washington Pre-College Test. Career interest was measured by the last scale consisting of ten multiple choice and fill-in items.

Procedure. At the start of each quarter, the Women's Studies Division of the Continuing Education Program holds an orientation session for women interested in enrolling in their classes. This session is advertised in the Continuing Education Bulletin, and mentioned in local newspapers. The 63 women were tested in twenty minutes at the start of the orientation program. They were told the tests represented the kinds of instruments counseling psychologists used to help them and they were promised "helpful feedback" for cooperating. Not one woman refused to take the battery.

After the orientation session approximately two-thirds of the women enrolled in one or two of the courses offered. This became the experimental group. The other third either decided not to enroll in any classes, or decided to participate at a later date. This group became the control group.

At the end of the quarter, when the classes were finished, all the women who completed the mini-battery at orientation were mailed the tests again. The tests were identical except for the problem solving section which consisted of the same number of different but equivalent problems. They also received an article entitled "Higher education: who needs it?" by the second author, which encourages women to stay in school. Along with the test and article they received their quartile score results from first testing compared to the norm group of regularly

enrolled college women. Only the top three quartile scores were used for self image, attitudes toward women, and career interest, however. Any score in the first quartile was given as the second quartile so as to give fairly accurate but not damaging results. By receiving feedback that they were in the second quartile the women would know that they needed to improve in that area, but would not have their self image lowered further by thinking that they were in the lowest possible quartile. On the problem-solving task all four quartile scores were given because some of the women did not solve any of the problems and knew it. An inflated score would have led to questioning the credibility of all the feedback. The explanation given for taking the tests over was for the purpose of establishing test reliability. Thus, those cooperative enough to fill out the test again and return it would, if anything, try to answer as they remembered doing on the first occasion  $2\frac{1}{2}$  months earlier. This instruction makes testing for differences a stringent situation.

The so-called norm group consisted of regularly enrolled college women, all younger than the continuing education women (scores of one middle-aged woman were omitted from this group). The norm group was used for several purposes. First, their scores were used as a means of comparison with the group of women in the Continuing Education Program. When the feedback was sent out, a subject was told how she compared with college women in general. For women thinking of coming back to college, it gave them some indication of how they compared to the younger, regularly enrolled group on these four measures. Second, this norm group

could also be compared with the other women for changes over time, as one type of control. Lastly, norm group data were used for doing the statistical analysis of test reliability.

The experimental group consisted of the 21 women who both enrolled in and completed a class, and who returned the retest. These 21 enrolled in three different classes, with four of them participating in two classes. The most popular class for this group was the one entitled Exploration, with 16 of the 21 taking it. The Exploration class is described in the brochure as follows:

For women seeking creative change in their lives. Group guidance techniques and testing will help define assets and abilities. Upon completion of the class, enrollees will be counseled individually on specific problems and decisions.

The course description illustrates what these women are seeking. This class (as with the other two classes, Perspectives and Focus) met weekly for six weeks. Each session of the Exploration class lasted for two hours; the other classes for ninety minutes. Each subject thus had participated in nine to twelve hours of class work, and some in individual counseling as well, at the time of retesting.

#### Results

Before analyzing the impact of the educational program on the 21 (of the 33) who participated (experimental group) vs. the 12 who did not (control group), it is important to see if the women who agreed to be retested differed in any respect from the 30 who did not return the retests. On no measure did the values of  $t$  reach the .05 level of significance. The less cooperative women can thus be assumed to be from

the same population as the more cooperative on all dependent measures and the results, such as they are, can be generalized to the entire group of women interested in continuing education at UW spring 1972.

When control and experimental groups were compared at first testing on all four tests, no differences between them reached statistical significance. Again, when they were compared upon retesting, their differences were very slight. At first glance it appears that nothing happened. When t-tests were conducted within each group for correlated observations, however, both control and experimental groups gained in problem-solving. Not much can be made of this finding, however, as in the retesting situation they were at home, alone, and presumably could have spent more time on the problems than they did in the 20 minutes testing time at orientation. The finding of interest is that the experimental Ss improved significantly in self-image while control Ss did not improve--as a matter of fact the controls actually declined in self-image over the  $2\frac{1}{2}$  months. Disappointing naturally is that the attitudes of the experimental group towards women and career orientation did not also increase. The 38 of 63 (60%) college women who were retested showed a similar gain in problem-solving ability. This group had been given the tests in class and returned them the next day. Since they filled out both at home, they would not have been likely to spend more time on the problems on the retest. The young college women also improved significantly in attitudes towards women, but showed no appreciable shift in self-image or career orientation as a result of attending school that spring.

The split-half reliabilities of the tests followed by the estimated reliabilities using the Spearman-Brown correction for length are: Self-Image, .82 (.90); Attitudes toward Women, .43 (.60); Problem-Solving, .23 (.32); Career Interest, .43 (.60).

#### Discussion

There are two basic explanations for the lack of significant results between the first and second tests for the experimental group. One explanation is that the tests used were inadequate, not sufficiently sensitive to changes occurring. The self-image scale was the only one to show a significant change in the experimental group. This scale was also the most reliable and the most standard. It was disappointing that the predicted changes in attitudes toward women and career interest did not occur along with the change in self-image. While a possible explanation is that the tests were not sensitive enough, the norm group of regularly enrolled college women did show a significant change in attitudes toward women. The norm group of younger college women was exposed to active women's groups and feminist studies programs on campus, which could account for their change. In contrast the Women's Studies Center of Continuing Education is a non-credit program and is located off campus. These women are thus less exposed to the other women's programs the university offers.

It would be interesting to do a further follow-up on the experimental and control groups at a later date. It is possible that it takes more time for a change in self-image to result in changes in attitudes toward women and career interest. Since the self-image change is recent, it may

not have had time to have full impact on the women's other attitudes as yet. At a later date, the changes in attitudes toward women and career interest could follow from the self-image change.

While the experimental group significantly improved in self-image, the control group did not. The classes did have as an unstated goal an improvement in self-esteem. But it seems likely that it is not just the class itself, but also the fact that the women are taking positive action to bring about a change in their life that leads to higher self-image. This could account for the fact that the control group had a lower score, i. e., they were contemplating action, but failed to follow through and participate in a class. The failure to find what they sought in this attempt could have made them more discouraged and made their image falter even more.

That all the groups improved in math was an interesting finding. As mentioned earlier, the women tested at the orientation session had more time at home on the retest, but this did not hold for the norm group. Since there were only five problems and the difference in one or two problems was therefore significant, it is possible that the second group was easier to solve although the problems were assigned at random to the two tests. Most of the older women had not practiced any formal mathematics for some time, thus another explanation is that the practice of working on the first test was enough to result in a change on the second.

What explains the lack of change in career interest and attitudes towards women in the experimental group? It is possible that the fault lay in the classes themselves, that they were ineffective. Or, although

the traits the tests were designed to measure were good, the tests themselves were experimental and of limited reliability. They will have to be more fully tested to establish their validity and perhaps revised to increase their reliability.

Another problem was the relatively small number of Ss. A larger sample size would have enhanced any small differences between the groups. It was not possible to manipulate the number of people attending the orientation originally, but the study could have been improved by making more of an effort to have the retests returned. It must be kept in mind that while the experimental group showed no change on the attitude toward women or career interest scales, the regularly enrolled college women did show a significant change on the attitudes toward women scale and the scale possesses enough sensitivity to be useful.

In conclusion, despite some problems with testing instruments the University does not appear to be having the impact on these women that it could be having. The improvement in self-image is significant and important, but the lack of change in the other areas is discouraging. If the norm group significantly changed their attitudes toward women in the time period without being specifically involved in a women's studies program, it seems that the experimental group should at least be expected to show a comparable change. Further evidence of the lack of effectiveness on the part of the University can be demonstrated by the sheer numbers involved. The number attending the orientation (where two thirds decided to enroll) was quite small given the population of the Seattle area. The facilities and staff allotted could not have handled

more, however. Given the potential in these women--their past education, the time now available, and their aspirations and desire for change--the University and its programs are offering too little in the way of constructive help in making important changes in their lives.

## References

- Broverman, I., Broverman, D., Clarkson, F., Rosenkrantz, P., and Vogel, S.  
Sex-role stereotypes and clinical judgments in mental health.  
Journal of Counseling and Clinical Psychology, 1970, 34, 1-7.
- Carey, G. L. Sex differences in problem-solving performance as a  
function of attitude differences. Dissertation, Stanford University,  
1955.
- Farmer, H. S., and Bohn, M. J. Home-career conflict reduction and the  
level of career interest in women. Journal of Counseling Psychology,  
1970, 17 (3), 228-232.
- Jorgensen, G., Janzen, F., Samuelson, C., and McPhee, W. Interpersonal  
relationships: Factors in job placement. Salt Lake City, Utah:  
Regional Rehabilitation Research Institute Bulletin No. 3, March, 1968.
- Korman, A. K. Self-esteem as a moderator of the relationship between  
self-perceived abilities and vocational choice. Journal of Applied  
Psychology, 1967, 51 (1), 65-67.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., and Broverman, D.  
Sex-role stereotypes and self-concepts in college students. Journal  
of Counseling and Clinical Psychology, 1968, 32, 287-295.
- Self, G. Women on the move: some common psychological problems. Paper  
presented to the Governor's Commission on the Status of Women, Las  
Vegas, Nevada, June 13-14, 1969.
- University of Washington, Bureau of Testing, Washington Pre-College Test.  
University of Washington, Spectrum, Bulletin of Continuing Education  
Division. Spring Quarter, 1972.
- Wylie, Ruth C. The self concept: A critical survey of pertinent research  
Literature. Lincoln: University of Nebraska Press, 1961.