### A short version of the Attitudes toward Women Scale (AWS)\*

## JANET T. SPENCE, ROBERT HELMREICH and JOY STAPP

University of Texas at Austin, Austin, Tex. 78712

A short (25-item) version of the Spence-Helmreich (1972) Attitudes toward Women Scale (AWS) is presented. Correlations between scores on the short and the full (55-item) version for groups of male and female students and groups of their parents were .95 or above. The results of a factor analysis and part-whole correlations also indicated the similarity of the two forms. Normative data for the student and parent samples are described.

The investigators have recently described (Spence & Helmreich, 1972a) the development of a Likert-type scale containing statements about the rights and roles of women in such areas as vocational, educational, and intellectual activities; dating behavior and etiquette; sexual behavior; and marital relationships. The instrument, which has been labeled the Attitudes toward Women Scale, or AWS, consists of 55 items, each of which has four response alternatives, ranging from agree strongly to disagree strongly. Each item is given a score from 0 to 3, with 0 representing the most traditional and 3 the most contemporary, profeminist response.

In putting together the initial item pool, an attempt was made to include statements which described roles and behaviors in all major areas of activity in which normative expectations could be, in principle, the same for men and women. The distribution of responses to each AWS item is important because of information it gives on contemporary attitudes toward the particular issue addressed. For this kind of descriptive purpose, it is desirable to have a lengthy scale which contains items covering all of the significant topics that are of interest. In common with other similar scales, a more frequent use of the AWS data involves obtaining a numerical index score for each individual in a given group (e.g., Spence & Helmreich, 1972b). These scores presumably reflect the degree to which the individual holds traditional or liberal views, and permit comparisons of the attitudes of various groups on this dimension, predictions of other behaviors on the basis of the individual's attitude score, etc. For this latter purpose, it is convenient to have available a shorter version of the AWS, which is nonetheless highly correlated with the full test. A 25-item form, whose development will be described here, was therefore devised.

#### **SELECTION OF ITEMS**

For each of the original 55 AWS statements, an item

\*The research was supported by a grant from the National Science Foundation (NSF GS-38144X), Janet T. Spence, Principal Investigator, and by the Office of Naval Research (Contract N 00014-67A-0126-0001, NR 171-804), Robert Helmreich, Principal Investigator.

analysis was performed on the data from 241 female and 286 male students in introductory psychology at The University of Texas at Austin, who were tested during the 1971-72 academic year. For each sex separately, the Ss were first divided into quartiles on the basis of their total AWS scores. The distribution of choices of the four response alternatives in each quartile group for each item was then obtained, and a biserial and point biserial r calculated. The 25 items which, by inspection, had distributions which maximally discriminated among quartile for both sexes, and which had the highest biserial correlations were selected for the short version. These items, along with the scoring key, are reproduced in Table 1.

# Table 1 Twenty-Five Item Form of the AWS and Its Scoring Key\*

#### Instructions

The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (A) agree strongly, (B) agree mildly. (C) disagree mildly, or (D) disagree strongly. Please indicate your opinion by blackening either A, B, C, or D on the answer sheet for each item.

#### Response = 0

- AS 1 Swearing and obscenity are more repulsive in the speech of a woman than of a man.
- DS 2 Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.
- DS 3 Both husband and wife should be allowed the same grounds for divorce.
- AS 4 Telling dirty jokes should be mostly a masculine prerogative.
- AS 5 Intoxication among women is worse than intoxication among men.
- DS 6 Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
- DS 7 It is insulting to women to have the "obey" clause remain in the marriage service.
- DS 8 There should be a strict merit system in job appointment and promotion without regard to sex.
- DS 9 A woman should be as free as a man to propose marriage.
- AS 10 Women should worry less about their rights and more about becoming good wives and mothers.
- DS 11 Women earning as much as their dates should bear equally the expense when they go out together.
- DS 12 Women should assume their rightful place in business and all the professions along with men.
- AS 13 A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a
- AS 14 Sons in a family should be given more encouragement to go to college than daughters.
- AS 15 It is ridiculous for a woman to run a locomotive and for a man to darn socks.
- AS 16 In general, the father should have greater authority than the mother in the bringing up of children.

- AS 17 Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances.
- DS 18 The husband should not be favored by law over the wife in the disposal of family property or income.
- AS 19 Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.
- AS 20 The intellectual leadership of a community should be largely in the hands of men.
- DS 21 Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.
- AS 22 On the average, women should be regarded as less capable of contributing to economic production than are men.
- AS 23 There are many jobs in which men should be given preference over women in being hired or promoted.
- DS 24 Women should be given equal opportunity with men for apprenticeship in the various trades.
- DS 25 The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

## COMPARISONS BETWEEN LONG AND SHORT VERSIONS

A number of comparisons were made between scores on the total AWS and the short form for the student sample. The results of these analyses are described below. Data were also available from a number of parents of these students (292 mothers and 232 fathers). As cross-validation, the same analyses on the same 25-item scale were performed on data from the parents.

Table 2
Decile Scores (Rounded) and Other Normative Data for the 25-Item AWS from Students and Parents

Deciles	Students		Parents ·	
	Males	Females	Fathers	Mothers
10	29	34	25	26
20	33	40	30	31
30	37	43	33	34
40	41	47	35	38
50	44	51	38	42
60	46	54	40	44
70	51	56	44	48
80	55	59	48	52
90	61	65	43	57
Mean	44.80	50.26	39.22	41.86
SD	12.07	11.68	10.49	11.62
Range	17-74	20-75	10-69	13-73

For each of the groups, a correlation was obtained between the Ss' scores on the 25-item version and the full scale. For the student samples, the resulting rs were .968 for the males and .969 for the females. The figures for the mothers and fathers were .956 and .963, respectively. Correlations were also obtained between total scores on the 25-item form and scores on the individual items. For the students, all r values were significant (p < .001) and ranged from .31 to .73, with the modal value for both sexes being in the .50s. For the parents, the values were somewhat lower, ranging from .14 to .70, with the mode being in the .40s. For both student and parent groups, a comparison of these part-whole correlations with those between each of the 25 items and scores on the full AWS showed that the former tended to be slightly higher.

The scale was factor analyzed using the SPSS (Nie. Bent, & Hull, 1970) principal axis routine. The scale proved to be essentially unifactorial, with the first unrotated factor accounting for 67.7% of the variance for females and 69.2% of the variance for males.

In summary, the analyses of both the student and the parent samples indicate that scores on the 25-item form are almost perfectly correlated with scores on the full set of 55 items and that the whole-part correlations and factor structures are also highly similar.

#### NORMATIVE DATA

Selected descriptive data for the males and females in both types of samples are shown in Table 2. A comparison of the means by t tests indicated that just as with the full scores, the means of the female students were significantly (p < .001) higher (more liberal) than the males, the means of mothers higher than fathers, and students higher than parents.

REFERENCES

Nie, N., Bent, D. H., & Hull, C. H. SPSS: Statistical package for the social sciences. New York: McGraw-Hill, 1970.

Spence, J. T., & Helmreich, R. The Attitudes toward Women Scale: An objective instrument to measure attitudes toward the rights and roles of women in contemporary society. JSAS Catalog of Selected Documents in Psychology, 1972a, 2, 66. Spence, J. T., & Helmreich, R. Who likes competent women? Competence, sex-role congruence of interests, and subjects' attitudes toward women as determinants of interpersonal attraction. Journal of Applied Social Psychology, 1972b, 2-3, 197-213.

(Received for publication July 5, 1973.)

<sup>\*</sup>The most conservative alternative, scored 0, is shown.