

## **Reliability, Validity, and Cross-Cultural Comparisons for the Simplified Attitudes Toward Women Scale**

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*This article investigates the use of the simplified version of the Attitudes Toward Women Scale with 278 American adults taken from the general population. Normative data and estimates of internal consistency reliability are reported, both for the overall sample and for selected subgroups. Females are found to have more liberal sex role attitudes than males, younger people to have more liberal attitudes than older people, and those of higher social status to have more liberal attitudes than those of lower status, supporting the construct validity of the scale. A cross-cultural comparison is also made between the scores of British and American women.*

Several scales are available for measuring sex role attitudes—i.e., subjects' normative conceptions of appropriate sex role behavior. These include, but are not limited to, scales by Dempewolff (1974), Brogan and Kutner (1976), Scanzoni (1975), and Kalin and Tilby (1978). Such scales are distinguished from others that attempt to measure sex role identity—i.e., masculinity, femininity, etc.—or gender stereotypes—i.e., subjects' descriptions of perceived sex role differences. Among sex role attitude measures, one of the most extensively used has been the Spence-Helmreich Attitudes Toward Women Scale. This scale was originally published with 55 items by Spence and Helmreich (1972), and later adapted to a 25-item short form (Spence, Helmreich, & Stapp, 1973). Much data are available to support the validity and reliability of both forms of the scale (e.g., Daugherty & Dambrot, 1986; Ghaffaradli-Doty & Carlson, 1979; Kilpatrick & Smith, 1974; Lunneborg, 1974; Smith & Bradley, 1980; Stein & Weston, 1976). It has been used for a variety of applications in the United States (e.g., Colker & Widom, 1980; Follingstad, Kilmann, & Robinson, 1976; Halas, 1974; Redfering, 1979; Zeldow & Greenberg, 1979) and has also been employed in other western cultures (e.g., Loo

& Logan, 1977; Stanley, Boots, & Johnson, 1975). A version has even been developed that is appropriate for use with adolescents (the AWS-A; Galambos, Petersen, Richards, & Gitelson, 1985).

One problem with this scale, as noted by Parry (1983), is that even in the short form, the language is rather complex and the items unnecessarily wordy. This limits the usefulness of the scale for samples taken from the general population, where reading levels range widely. Parry simplified the language in 22 of the 25 items on the short form, and administered the simplified version to two samples of British women. The scale had acceptable internal consistency reliability for these samples (Cronbach's  $\alpha = .77$  and  $.85$ ), and construct validity was demonstrated by the fact that it discriminated significantly between women in the working class (more traditional scores) and those in the upper middle class (more liberal scores). Parry did not test the scale on samples of men, and to date, no information is available on its use with Americans.

The current article presents data on the use of this simplified version of the Attitudes Toward Women Scale (AWS-S)<sup>1</sup> with a sample of Americans taken from the general population. In addition to presenting normative data, the current study examines several hypotheses pertinent to the construct validity of the scale. In previous research, sex role attitudes have been found to be related to a person's gender, age, and socioeconomic status. For example, using both the original and short versions of the AWS, women have been found to have more liberal views than men, and students more liberal views than their parents (Argentino, Kidd, & Bogart, 1977; Loo & Logan, 1977; Smith & Bradley, 1980; Spence & Helmreich, 1972; Spence et al., 1973). Adolescent girls have also been found to have more liberal views than boys, using the AWS-A (Galambos et al., 1985). In another set of findings, as mentioned above, Parry (1983) found British working-class women to have more traditional sex role orientations than their upper middle-class counterparts. Lower-class adolescents have also been found to have more traditional attitudes than higher-class adolescents using the AWS-A (Galambos et al., 1985). Thus, the construct validity of the AWS-S would be supported if it reveals American adult females to have more liberal sex role orientations than males, younger people to have more liberal views than older people, and those of higher socioeconomic status to have more liberal views than those of lower status. In addition to presenting normative data and the results of these comparisons, the current paper will also examine cross-cultural differences between British and American women for scores on the AWS-S.

<sup>1</sup>Parry (1983) used the acronym "AWS-B" for the simplified version of the scale, since it was initially used with British subjects. However, there is nothing inherently "British" about the simplified version, except possibly the use of the word "pubs," which was changed to "bars" for Americans. Since it is both short and simple, this version is hereafter referred to as the "AWS-S."

## METHOD

### *Subjects*

Subjects were 278 men and women, living throughout the continental United States, who responded to a mailed questionnaire as part of a larger study.<sup>2</sup> They ranged in age from 20 to 80 years, with a mean of 43.4 years (median = 42.0 years). Sixty percent of the subjects were male. Although the sample was somewhat upscale overall, all levels of socioeconomic status were represented. Personal income ranged from \$0 to over \$55,000 per year (mean = \$29,500; median = \$22,500), education from grade school to graduate school (mean = 2 years college; median = 4 years college), and occupation from unemployed and manual laborer to professional and managerial.

### *Instrument*

The scale presented in Parry's (1983) article was adapted slightly for use in the present study. One ambiguous item (No. 16) was eliminated, as Parry suggests. However, this was replaced with an item similar to No. 18 of the 25-item short form (Spence et al., 1973). This served to equalize the number of items stated in the traditional way with those stated in the liberal direction (11 each), and also to reinstate one idea that had been eliminated from Parry's version.<sup>3</sup> In addition, some items from Parry's version were further simplified. In one case (No. 13), the wording of the original AWS was retained because pretest subjects found it more understandable than Parry's version. Other minor word changes included replacing "girls" with "women" and "pubs" with "bars."

The resulting 22 items were presented in a 5-point Likert-type format, with coding ranging from 1 to 5. Items worded in the traditional direction (Nos. 1, 3, 4, 9, 11, 13, 14, 15, 17, 19, and 20) were reverse scored. Total scores on the measure could range from 22 to 110, with lower scores representing a more traditional sex role orientation. The complete scale is presented in Table I.

<sup>2</sup>The larger study dealt with influences on family decision-making processes. Names of potential subjects were derived from a nationwide mailing list of randomly selected individuals who had recently purchased a new car.

<sup>3</sup>Parry had stated that three items could not be simplified, and left them out of the AWS-B. Two of these items had tapped the concept of equal rights in a divorce. These items (Nos. 3 and 18 from the Spence et al., 1973, short form) were condensed and simplified into a single new item (No. 16) for use in the present study.

**Table I.** Simplified Version of the Attitudes toward Women Scale

For each item, just circle the number that corresponds to your answer:

- 1 = Disagree strongly (DS)  
 2 = Disagree (D)  
 3 = Neutral (N)  
 4 = Agree (A)  
 5 = Agree strongly (AS)

|   | DS | D | N | A | AS |
|---|----|---|---|---|----|
| 1. It sounds worse when a woman swears than when a man does.  | 1  | 2 | 3 | 4 | 5  |
| 2. There should be more women leaders in important jobs in public life, such as politics.   | 1  | 2 | 3 | 4 | 5  |
| 3. It is all right for men to tell dirty jokes, but women should not tell them.   | 1  | 2 | 3 | 4 | 5  |
| 4. It is worse to see a drunken woman than a drunken man.   | 1  | 2 | 3 | 4 | 5  |
| 5. If a woman goes out to work her husband should share the housework, such as washing dishes, cleaning, and cooking.   | 1  | 2 | 3 | 4 | 5  |
| 6. It is an insult to a woman to have to promise to "love, honor, and obey" her husband in the marriage ceremony when he only promises to "love and honor" her. | 1  | 2 | 3 | 4 | 5  |
| 7. Women should have completely equal opportunities as men in getting jobs and promotions.  | 1  | 2 | 3 | 4 | 5  |
| 8. A woman should be as free as a man to propose marriage.  | 1  | 2 | 3 | 4 | 5  |
| 9. Women should worry less about being equal with men and more about becoming good wives and mothers.   | 1  | 2 | 3 | 4 | 5  |
| 10. Women earning as much as their dates should pay for themselves when going out with them.  | 1  | 2 | 3 | 4 | 5  |
| 11. Women should not be bosses in important jobs in business and industry.  | 1  | 2 | 3 | 4 | 5  |
| 12. A woman should be able to go everywhere a man does, or do everything a man does, such as going into bars alone.   | 1  | 2 | 3 | 4 | 5  |
| 13. Sons in a family should be given more encouragement to go to college than daughters.  | 1  | 2 | 3 | 4 | 5  |
| 14. It is ridiculous for a woman to drive a train or for a man to sew on shirt buttons.   | 1  | 2 | 3 | 4 | 5  |
| 15. In general, the father should have more authority than the mother in bringing up children.  | 1  | 2 | 3 | 4 | 5  |
| 16. The husband should not be favored by law over the wife when property is divided in a divorce.   | 1  | 2 | 3 | 4 | 5  |
| 17. A woman's place is in the home looking after her family, rather than following a career of her own.   | 1  | 2 | 3 | 4 | 5  |
| 18. Women are better off having their own jobs and freedom to do as they please, rather than being treated like a "lady" in the old-fashioned way.              | 1  | 2 | 3 | 4 | 5  |
| 19. Women have less to offer than men in the world of business and industry.  | 1  | 2 | 3 | 4 | 5  |
| 20. There are many jobs that men can do better than women.  | 1  | 2 | 3 | 4 | 5  |
| 21. Women should have as much opportunity to do apprenticeships and learn a trade as men.   | 1  | 2 | 3 | 4 | 5  |
| 22. Girls nowadays should be allowed the same freedom as boys, such as being allowed to stay out late.  | 1  | 2 | 3 | 4 | 5  |

## RESULTS

*Normative Data and Internal Consistency Reliability*

Table II presents the range, mean, and standard deviation of observed scores, as well as the internal consistency reliability (Cronbach's alpha) of the scale. These statistics are presented for the overall sample, as well as for subgroups of women only, men only, higher socioeconomic status, lower socioeconomic status, younger age group, and older age group. As Table II shows, the reliability coefficients ranged from .78 to .85. In no case would the alpha coefficient have increased by omission of any of the scale items.

*Differences Among Subgroups*

A  $2 \times 2 \times 2$  analysis of variance was conducted to determine whether the variables of gender, socioeconomic status, and age accounted for differences in the AWS-S scores of respondents. Table III presents the results of this analysis. As can be seen in this table, scores of women were significantly higher than those of men ( $p < .001$ ), those in the higher social class group

**Table II.** Scores on the AWS-S for the Sample Overall and Selected Subgroups

|   | Range  | Mean | SD   | Cronbach's<br>Alpha |
|---|--------|------|------|---------------------|
| Overall ( $N = 278$ )                             | 56-108 | 80.0 | 11.3 | .84                 |
| Women ( $N = 117$ )                               | 59-104 | 84.1 | 11.5 | .85                 |
| Men ( $N = 161$ )                                 | 56-108 | 77.0 | 10.3 | .81                 |
| Higher social class <sup>a</sup><br>( $N = 126$ ) | 59-108 | 82.6 | 11.4 | .85                 |
| Lower social class<br>( $N = 70$ )                | 59-102 | 78.4 | 10.1 | .78                 |
| Under 40 years old<br>( $N = 123$ )               | 58-105 | 83.8 | 10.2 | .83                 |
| Age 40 and over<br>( $N = 152$ )                  | 56-108 | 76.8 | 11.2 | .83                 |

<sup>a</sup>Social class groups were determined on the basis of the respondent's occupation, elicited in open-ended format, and then coded into occupational categories. The higher social class group includes those subjects who could be clearly classified as upper middle class or above (professionals, managers, officials, and proprietors). The lower social class group includes those who could be clearly classified as lower middle class or below (clerical, craftsmen, foremen, operatives, service workers, and laborers).

**Table III.** Analysis of Variance to Determine the Effects of Gender, Socioeconomic Status, and Age Group on AWS-S Scores

| Source of variation    | SS         | df  | F      | p    |
|------------------------|------------|-----|--------|------|
| Main effects           | 4784.324   | 3   | 15.793 | .000 |
| Gender (A)             | 2648.836   | 1   | 26.232 | .000 |
| Social status (B)      | 1007.907   | 1   | 9.982  | .002 |
| Age (C)                | 1007.618   | 1   | 9.979  | .002 |
| Two-way interactions   | 197.937    | 3   | .653   | .582 |
| A × B                  | 86.611     | 1   | .858   | .356 |
| A × C                  | 23.669     | 1   | .234   | .629 |
| B × C                  | 68.560     | 1   | .679   | .411 |
| Three-way interactions |            |     |        |      |
| A × B × C              | 20.067     | 1   | .199   | .656 |
| Explained              | 5002.328   | 7   | 7.077  | .000 |
| Residual               | 18,882.667 | 187 |        |      |

were significantly higher than those in the lower social class group ( $p < .01$ ), and those of the younger age group were significantly higher than those of the older age group ( $p < .01$ ). There were no significant interactions.

### *Cross-Cultural Comparison*

Table IV presents the result of a cross-cultural comparison between Parry's (1983) two samples of British women and two similar samples of American women (drawn from subjects in the current study). Scores on the AWS-S were recoded (0-4) for this analysis, and the score for Item 16 omitted, to facilitate comparison with the British data. As Parry had reported for the British subjects, scores of higher social status American women were significantly more liberal than those of lower social-status American women ( $t = 2.76$ , 79 df,  $p < .01$ , two-tailed test). However, American women of relatively low socioeconomic status have significantly more liberal scores than do lower class British women ( $t = 10.61$ , 135 df,  $p < .001$ , two-tailed test). On the other hand, scores of American and British women in the upper middle class are not significantly different ( $t = 1.54$ , 146 df, ns, two-tailed test).<sup>4</sup>

<sup>4</sup>It should be noted that the individual's own occupation was used in the American sample for estimating social status, not the higher status of individual vs spouse (as in the British sample). Computing social status in the latter way does not alter the results of the analysis. For the two American samples,  $t = 2.84$ , 69 df,  $p < .01$ ; for the British vs American lower-class samples,  $t = 8.28$ , 125 df,  $p < .001$ ; and for the British vs American higher class samples, all data remain unchanged.

**Table IV.** Cross-Cultural Comparison of Scores on the AWS-B/AWS-S for British and American Women<sup>a</sup>

| Sample  | Range | Mean  | SD    |
|---|-------|-------|-------|
| British working-class women<br>( <i>N</i> = 104)      | 25–77 | 49.98 | 9.11  |
| American working-class women<br>( <i>N</i> = 33)      | 35–76 | 56.58 | 10.88 |
| British upper middle-class women<br>( <i>N</i> = 100) | 41–83 | 62.30 | 10.83 |
| American upper middle-class women<br>( <i>N</i> = 48) | 36–78 | 63.19 | 10.43 |

<sup>a</sup>Data on the British samples are from Parry (1983). The scores of the second and fourth samples are significantly different from one another ( $t = 2.76, p < .01$ ). Scores of the first and second samples are significantly different from one another ( $t = 10.61, p < .001$ ). Scores of the third and fourth samples are not significantly different from one another ( $t = 1.54, ns$ ). See text for additional details.

## DISCUSSION

This study examines the use of a simplified version of the popular Spence-Helmreich Attitudes toward Women Scale, designed for use with subjects from the general population. If such a scale can be shown to have acceptable validity and reliability, it would facilitate the measurement of sex role attitudes among subjects from outside the traditional college student population. The present results show the AWS-S to have acceptable internal consistency reliability (Cronbach's alpha = .84) for a sample of 278 American adults. The reliability coefficient is not appreciably different for any of several subgroups examined; its lowest value is .78 for the lower social class subgroup. Construct validity was examined in terms of the scale's ability to discriminate among subgroups expected to have significantly different sex role attitudes. The differences were significant and in the hypothesized direction for all subgroups. Consistent with results using other versions of the AWS, women were found to have more liberal sex role attitudes than men, younger people to have more liberal attitudes than older people, and those of higher social status to have more liberal attitudes than those of lower status. Taken as a whole, these results are supportive of the construct validity of the AWS-S for measuring the sex role attitudes of American adults.

The major limitation of the present study is that the sample was still somewhat upscale overall, even though all levels of education, income, and occupational status were represented. It would be beneficial to conduct additional research using the AWS-S with samples of limited socioeconomic status—particularly lower educational backgrounds—in order to supplement

and extend the present results. In any case, the current findings suggest that for measuring the sex role attitudes of American adults, the AWS-S is an acceptable alternative to the longer and more complex versions of Spence and Helmreich (1972) and Spence et al. (1973).

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