

## Brief Report:

# Interrater Agreement of Experts' Fear of Success Imagery Scoring

John R. Moreland, Southern Illinois University

Nechama Liss-Levinson, Southern Illinois University

Horner (1968) hypothesized that achievement-oriented behavior in women was influenced by a socially learned avoidant motive, the motive to avoid success, popularly referred to as fear of success (FOS). In the eight years since Horner's original work, her conceptualization has received considerable popular acclaim. However, the literature in this area is confusing and, at times, contradictory.

FOS is typically measured by analyzing the imagery in a story written to a verbal cue such as, "After first term finals Anne/John finds himself/herself at the top of her/his medical school class." There is practically no consistency across studies in the proportion of women who include FOS imagery in their stories. The percentages range from a high of 89% (Alper, 1974) to a low of 16% (Winchel, Fenner, and Shaver, 1974). Other investigators have found percentages of FOS imagery in the stories of male subjects which range from a low of 9% (Horner, 1968) to a high of 76% (Hoffman, 1974).

Investigators have attempted to account for these differences by suggesting that they reflect changing societal definitions of sex-role appropriate behavior for women and a questioning of societal standards of success by men. However, Tresmer (1973) has shown that variations in the proportion of subjects scoring high in FOS do not follow any systematic chronological order. Other researchers have asserted that subjects' age differences are responsible for the differences in the percentage of FOS imagery across studies. However, in their comprehensive review of the literature, Zuckerman and Allison (1975) failed to observe a relationship between FOS and age.

Another explanation for these variations is

that they are due to differences in the interpretations given the ambiguous scoring guidelines by different sets of investigators. In other words, FOS imagery is not being reliably scored across studies. The present investigation was conducted to assess the amount of agreement in scoring FOS imagery across sets of investigators.

## Method

### Subjects

Subjects were the authors of the 13 FOS studies which had been either published or accepted for publication in APA journals by October, 1974. Eight of the thirteen investigators returned completed protocols.

### Procedure

Twenty stories written to the "Anne medical cue" were selected from approximately 300 stories collected by the authors. Five stories clearly contained FOS imagery, while five did not contain such imagery. Although the remaining ten stories were selected because they were less clearcut, it was felt that they represented the kinds of stories typically written by undergraduates. Each of the thirteen investigators were asked to score each story for FOS imagery.

### Analysis

Responses from the different investigators were compared for the presence or absence of FOS imagery for each story. Since any pair of raters could be expected to agree fifty percent of the time by chance alone, Cohen's K coefficient was used as an indicator of the proportion of agreements between two raters after chance agreement has been removed from consideration, as suggested by Tinsley and Weiss (1975). Also the dichotomous ratings of the eight raters on each of the twenty stories were analyzed using the intraclass correlation coefficient.

## Results

Cohen's K coefficient was calculated to indicate the degree of non-chance agreements between all pairwise combinations of expert scorers. The proportion of non-chance agreement between each combination of expert raters ranged from a low of .10 to a high of .80. The modal value was .60 while the mean and median were both equal to .50.

In addition, the average reliability of a single judge's ratings was calculated using the intraclass correlation coefficient. This value was equal to .51.

## Discussion

Although the present study cannot eliminate alternate explanations, it does support the authors' contention that one reason the FOS literature is confusing and contradictory is because the FOS construct is not being reliably measured across studies. Horner (1972) has suggested that the percentage of agreement between pairs of raters in the same study making the dichotomous present-absent distinction should be at least 85%. After correcting her guideline for chance agreement using Cohen's Kappa adjustment, a pair of raters should agree at least 70% of the time, beyond that expected by chance. The average percent inter-rater agreement beyond that expected by chance for the expert raters who served as subjects in the present study was only .50, considerably below Horner's suggested guideline. Comparison of data across studies using raters less expert than those used in this study would probably indicate even lower levels of agreement.

It should be remembered that these reliability data are based upon scoring discriminations to stories written for only the "Anne medical cue." Stories written to other verbal leads present their own arbitrary scoring problems. It is possible that had we presented our raters with stories written to other cues the amount of expert inter-rater agreement would have been even lower.

Current scoring guidelines are insufficient for ensuring the reliable measurement of the motive

to avoid success. An objective measure of FOS could not only guarantee greater reliability of measurement across studies in the FOS literature, but could also facilitate the measurement of the motive to avoid success across a broader, more representative sampling of potential FOS eliciting situations. To date only Spence (1974) and Zuckerman & Allison (1975) have published any objective instruments purporting to measure FOS. Work such as theirs should be continued. Until such time as a reliable objective measure of the motive to avoid success exists, it is very unlikely that the validity of the construct can ever be determined.

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## Author's Address

John R. Moreland, Department of Psychology, Southern Illinois University, Carbondale IL 62901.

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