# Sex Bias, Diagnosis, and DSM-III

Sandra Hamilton Eugene, Oregon

# Myron Rothbart and Robyn M. Dawes

University of Oregon

Sixty-five licensed clinical psychologists independently diagnosed 18 written case histories on the basis of 10 DSM-III categories. The results showed that females were rated significantly more histrionic than males exhibiting identical histrionic symptoms. There was no comparable sex bias to diagnose males showing antisocial pathology as more antisocial than females. The explanation proposed is that the antisocial category is behaviorally anchored whereas the histrionic category is trait dominated. Thus, the findings suggest that vague diagnostic descriptions promoted sex stereotyping and sex bias in diagnosis.

The issue of sex bias in DSM-III (American Psychiatric Association, 1980) has recently received considerable attention. Although the DSM-III was constructed to provide an objective approach to diagnosis, writers such as Kaplan (1983) have challenged its objectivity. According to Kaplan, a pervasive masculine bias in DSM-III promotes increased diagnosis and treatment for women. In response, Williams and Spitzer (1983) argue that Kaplan's assertions are unfounded, because some diagnostic categories are more commonly assigned to males, e.g., antisocial personality disorder.

In resolving this discrepancy of opinion, categories in DSM-III should be individually evaluated. It is likely that sex bias is more often utilized when diagnostic categories describe personality traits rather than behaviors. That is, if an individual shows symptoms that are characterologically described rather than behaviorally defined in DSM-III, the clinician may be more likely to utilize the given sex ratios in order to establish the diagnosis.

This issue was studied by comparing diagnostic ratings assigned by clinical experts to individuals showing antisocial pathology and histrionic symptoms. The antisocial category was chosen because it is comprised of symptoms. The antisocial category was chosen because it is comprised of well-defined behavioral indicators and is more commonly seen in males, whereas the histrionic personality category, a disorder typically diagnosed in females, is composed of global personality descriptors, e.g., "vain" and "demanding." The experts were presented with identical descriptions derived from DSM-III; however, in some instances the described individual was identified as female, and in others the exact same description portrayed a male.

The purpose of this study was to show that clinical experts would be more likely to assign a histrionic diagnosis to a female rather than a male showing identical symptoms. Further, it was hypothesized that this sex bias would be more likely to emerge with clinicians of the opposite sex. It was also hypothesized that sex bias would be stronger when the described individual showed less than the pure disorder described in DSM-III. In contrast, neither the sex of the individual described nor the sex of the clinician was expected to affect the diagnosis of individuals showing antisocial pathology.

# **METHOD**

A four-way factorial design was used to examine the diagnostic judgments of (a) identification of the individual described as male or female, (b) five levels of pathology, (c) two forms of the inventory, and (d) sex of clinician.

Licensed clinicians independently diagnosed 18 case studies on the basis of 10 DSM-III categories including antisocial and histrionic personality. The 10 critical profiles described one male and one female representing one of five levels of pathology: (a) all antisocial behavior, (b) all histrionic characteristics, (c) a predominance of antisocial behaviors with histrionic symptoms, (d) a predominance of histronic descriptors with antisocial symptoms, or (e) an equal combination of histrionic and antisocial indicators. The remaining case studies presented typical descriptions of eight other disorders not commonly seen in either sex.

To assure equivalence of judgments across the five levels, a "withinstory" comparison was made, e.g., if "Story A" in "Form 1" described a male showing antisocial pathology, then it was compared to "Story A" from "Form 2," which described the exact individual using a female pronoun. Although it would have been of interest to compare the diagnostic ratings of each clinician using the same description for both males and females, a within-clinician comparison was not made since the subjects would realize that they were reading the same case study.

#### Subjects

Sixty-five licensed clinical psychologists were personally solicited from the local and the state psychological association in Oregon, or contacted by phone to participate in a study regarding clinician judgment. All 25 female and 40 male participants claimed to have familiarity and experience with DSM-III diagnostic categories.

## Stimulus Materials and Design

The DSM-III case book (Spitzer, Skodol, Gibbon, & Williams, 1981) was used to construct the case profiles. Of the 18 case studies, the 10 critical cases presented two equivalent forms of five levels of antisocial or histrionic symptomology. That is, two showed either all antisocial or histrionic traits and behaviors, two described seven antisocial or histrionic descriptors in combination with three histrionic or antisocial symptoms, respectively, and two showed five indicators from each category.

In order to distract the participants from the hypothesis of the study, the packet included four male and four female noncritical profiles describing pure clinical cases of avoidant personality disorder, paranoid disorder, generalized anxiety disorder, hypochondriasis, schizotypal personality disorder, obsessive-compulsive disorder, passive-aggressive personality disorder, and depersonalization disorder.

All subjects were mailed the packet, which also contained an informed consent sheet, instructions, a brief description of each diagnostic category presented, and 18 case studies. Subjects were reminded by postcard to return the inventory after two weeks. The participants were instructed to assign an applicability rating of 1–11 of each of the 10 diagnostic categories presented after each clinical profile.

Example

1	2	3	4	5	6	7	8	9	10	11	
Diagnositic category								Diagnostic category			
is not applicable							is applicable				

In order to preserve confidentiality, subjects anonymously mailed the inventories back, although the materials were previously coded for form and sex of subject.

### RESULTS

Figure 1 (a, b) shows the mean diagnostic ratings for antisocial and histrionic categories, respectively, for the five levels of pathology across clini-

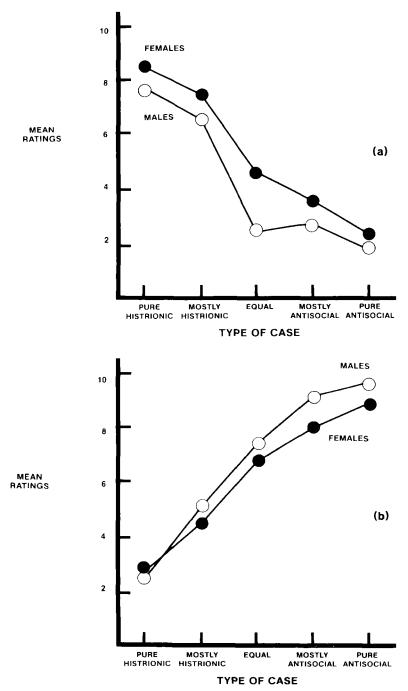


Fig. 1. (a) Mean diagnostic ratings of the histrionic category for male and female case descriptions. (Mean ratings are collapsed across clinician sex because there was no significant effect for this variable.) (b) Mean diagnostic ratings of the antisocial category for male and female case descriptions. (Mean ratings are collapsed across clinician sex because there was no significant effect for this variable.)

cian sex. An analysis of variance for repeated measures was used to assess histrionic and antisocial diagnostic ratings assigned to the 10 critical case studies by forms of inventory, level of pathology, sex of described "client," and clinician sex. Due to the design constraints discussed earlier, the histrionic and antisocial descriptions were analyzed separately.

As shown, the main effect for sex of the described individual was highly significant for the histrionic category [F(1, 640) = 15.81, p > .0001], but not for the antisocial category [F(1, 640) = 1.94, p > .16]. Thus, females were consistently rated more histrionic than males exhibiting identical symptoms.

Further, the strong effect of the client's sex for the histrionic category was not mediated by the sex of clinician [F(1, 640) = .20, n.s.] or by an interaction between the sex of clinician and level of pathology [F(4, 640) = .91, n.s.]. Similarly, no significant interactions between sex of client and clinican sex, as well as level of pathology and clinician sex, were shown for the antisocial category [F(4, 640) = .36, n.s.; F(4, 640) = .51, n.s., respectively].

#### DISCUSSION

The findings related to the use of the histrionic category are quite clear. The diagnostic category is much more likely to be applied to female than male clients, even when the presenting symptoms are identical. Moreover, the strong effect of client's sex is not affected by the sex of the clinician, by the interaction between sex of clinician and sex of client, or by the level of pathology manifest by the client.

In contrast, the use of the antisocial category failed to show a significant sex bias despite a somewhat greater use of the category for male than for female clients. It is likely that the category's behavioral diagnostic criteria anchors diagnostic ratings, whereas the descriptive traits symptomology of the histrionic category allows clinicians to operationalize the descriptors in the direction of gender expectation. It should be noted that potential sex bias for this category is compounded by the stereotypically feminine references found in the text of DSM-III that describes histrionic behavior. Specifically, the text states, "in both sexes overt behavior is often a caricature femininity..." and that these individuals commonly "act out a role, such as the 'victim' or 'princess'...." Further, male histrionic personalities are thought to show "homosexual arousal patterns" (pp. 313-314).

An ideal test of sex bias in DSM-III would compare two behaviorally defined diagnostic categories that are each primarily diagnosed in males or females, e.g., antisocial personality and depression, respectively, with two trait-dominated categories typically represented by either sex. This method is not possible because the DSM-III lacks descriptive trait-dominated categories more commonly assigned to males. A modification of diagnostic categories that are vaguely described may alleviate potential diagnostic sex bias. Such a modification is particularly recommended for the personality disorders, because DSM-III states that the interrater reliabilities for these categories are low (.26-.75) where, not surprisingly, antisocial personality shows the highest interrater reliability. Thus, a more objective criterion may not only alleviate sex bias but may promote greater consistency across diagnosticians.

Because the present research is concerned with the effects of gender stereotypes, it is worth nothing that the social-psychological literature on stereotyping has shown that the effect of gender information is greatly attenuated when accompanied by individuating information (Locksley, Borgida, Brekke, & Hepburn, 1980; Locksley, Hepburn, & Ortiz, 1982). The fact that in the present research gender information had a very powerful influence in the presence of highly detailed, and often counterstereotypic information, is a testimony to the power of sex stereotypes in influencing psychiatric classification.

#### REFERENCES

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, D.C.: Author, 1980.
- Kaplan, M. A woman's view of DSM-III. American Psychologist, 1983, 39, 786-792.
- Locksley, A., Borgida, E., Brekke, N., & Hepburn, C. Sex stereotypes and social judgment. Journal of Personality and Social Psychology, 1980, 39, 821-831.
- Locksley, A., Hepburn, C., & Ortiz, V. Social stereotypes and judgments of individuals: An instance of the base-rate fallacy. *Journal of Experimental Social Psychology*, 1982, 18, 23-42.
- Spitzer, R. L., Skodol, A. E., Gibbon, M., & Williams, J. B. W. DSM-III case book. Washington, D.C.: American Psychiatric Association, 1981.
- Williams, J. B. W., & Spitzer, R. L. The issue of sex-bias in DSM-III. American Psychologist, 1983, 38, 793-798.