

Diagnosis of Sexual Dysfunction: relationships between DSM-III(R) and the GRISS

SUSAN GOLOMBOK PhD¹ & JOHN RUST PhD²

¹*City University London, and* ²*Department of Psychology, University of London
Institute of Education, 25 Woburn Square, London WC1H 0AA, United Kingdom*

ABSTRACT *The diagnostic categories for sexual dysfunction provided by the revised third edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) are compared with those of the Golombok Rust Inventory of Sexual Satisfaction (GRISS) and the Golombok Rust Inventory of Marital State (GRIMS). Similarities and differences are considered. It is concluded that the psychometric profile provided by the GRISS is more appropriate for judging severity of symptoms.*

Introduction

A major outcome of the work of Masters & Johnson (1970) has been the development of a scientifically based diagnostic system for the classification of disorders of sexual functioning. As well as clarifying the four stages of sexual arousal (arousal, excitement, orgasm and resolution) they established within relatively clear parameters the specific disorders of impotence, premature ejaculation, vaginismus and anorgasmia. However, throughout the 1970's there was no clear consensus on how the specific dysfunctions related to the particular stages of sexual arousal. The development of the World Health Organization's *International Classification of Diseases* (9th edition) in 1978 saw some progress, although the heavy bio-medical bias of this classification system did not match too readily with the Masters & Johnson ideology. The publication of the 3rd edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* in 1980 saw the first formal recognition within the psychiatric establishment of those categories of sexual dysfunction used by sex therapists.

Assessment by Diagnostic Category

The DSM-III category system was not accepted without criticism however, and in 1982 Schover *et al.* proposed an alternative 'Multiaxial problem-oriented system' on the grounds that the DSM-III criteria were too broad and failed to discriminate between life-long and temporary sexual dysfunction. This proposal reintroduced Masters & Johnson's original concepts of the four stages of sexual desire into the

diagnostic process. They also pointed out the failure of DSM-III to emphasise the differential importance of degrees of severity in, for example, premature ejaculation, and the importance of normative data in determining levels of sexual desire. It was argued that the proper approach to diagnosis in sex therapy is to categorise the sexual dysfunctions by describing sexual behaviour, rather than by making inferences about aetiology, as is the common practice under the medical model advocated by DSM-III. Schover *et al.* also emphasised the distinction between disorders at the various stages of sexual arousal proposed by Masters & Johnson, differentiating between desire, arousal and orgasm, following Kaplan's (1979) triphasic model of the sexual response cycle.

While the multi-axial system of Schover *et al.* was clearly an improvement on that of DSM-III, for specialists within sexual dysfunction clinics it was perhaps too complex and unwieldy for everyday use, and is now in the process of being superseded by a new classification within the revised edition of DSM-III (DSM-III(R), 1987). DSM-III(R) modifies several of the DSM-III diagnoses to take account of the many criticisms which had been made of the original version. It specifies nine diagnoses, which appear in the key to Table 1.

Changes include the separate specification of psychogenic versus biogenic, lifelong versus acquired and generalised versus situational dysfunction. The former DSM-III category of Inhibited Sexual Desire is subdivided within DSM-III(R) into two categories of Hypoactive Sexual Desire Disorder and Sexual Aversion Disorder. The DSM-III diagnosis of Inhibited Sexual Excitement is subdivided in DSM-III(R) into two separate conditions for men and women—Female Sexual Arousal Disorder and Male Erectile Disorder. This makes clearer the differentiation of disorders of arousal from disorders of orgasm.

However, while the DSM-III(R) diagnostic criteria are an improvement on DSM-III in terms of their specificity, they still tend towards a representation of an underlying theoretical model rather than of actual behaviour, although the theoretical model used, that of Masters & Johnson (1970), does have a strong behavioural base. While it makes sense in theory to distinguish between, for example, male impotence in terms of whether it is at the desire, arousal or performance stage, it is perhaps misleading to imply that there are three separate phenomena here. The three stages clearly operate within a system, and as with all systems models there is a high degree of interdependence and backward and forward chaining of association. Because of the complexity of these interactions it may well be more sensible in practice to treat all three stages as different aspects of an underlying disorder of erection. However, this is in many ways an empirical matter, dependent on the degree of correlation between adjacent categories, and can only really be judged in terms of how particular diagnoses for sexual dysfunction relate to normal sexual behaviour.

Assessment by Psychometric Profile

An alternative approach to the diagnostic interview in psychiatry is provided by the psychometric profile (Rust, 1988a, 1988b). The concept of relating sexual

TABLE I. The relationship of DSM-III(R) diagnostic categories of sexual dysfunction to the 12 GRISS subscales and the GRIMS and GRISS main scales

DSM-III(R) Category	Major GRISS criteria	Minor GRISS criteria
301.71	M, F	1, 3, 6, 10, 12
302.79	4, 9	M, F, 3, 7, 10, GRIMS
302.72 (F)	12, 10	F, 6, 9, 10, 11,
302.72 (M)	1	M, 3, 4, 5, 6, 8
302.73	12	F, 5, 10
302.74	—	M, 1, 3, 5, 8
302.75	2	M, 8, 9, 12
302.76	—	M, 4, 5; F, 11, 8, 9; 6
306.51	11	F, 1, 5, 6, 9
V CODE 61.10	GRIMS	4, 9

DSM-III(R) Diagnostic Categories

- 301.71 Hypoactive Sexual Desire Disorder
- 302.79 Sexual Aversion Disorder
- 302.72 Female Sexual Arousal Disorder
- 302.72 Male Erectile Disorder
- 302.73 Inhibited Female Orgasm
- 302.74 Inhibited Male Orgasm
- 302.75 Premature Ejaculation
- 302.76 Dyspareunia
- 306.51 Vaginismus
- V Code 61.10 Marital Problem

GRISS scales and sub-scales

M.	Male overall GRISS scale	F. Female overall GRISS scale
1.	Impotence	2. Premature Ejaculation
3.	Male Non-sensuality	4. Male Avoidance
5.	Male Dissatisfaction	6. Infrequency
7.	Non-communication	8. Female Dissatisfaction
9.	Female Avoidance	10. Female Non-sensuality
11.	Vaginismus	12. Anorgasmia

behaviour to norms is also a characteristic of the psychometric approach to the assessment of sexual dysfunction. The Golombok Rust Inventory of Sexual Satisfaction (GRISS) (Rust & Golombok 1985, 1986a & b, 1988a; Rust *et al.* 1987, 1988; Bennun *et al.*, 1985; Golombok *et al.*, 1984) provides a twelve sub-scale profile giving each couple scores of anorgasmia and vaginismus in the female partner; impotence and premature ejaculation in the male partner; avoidance, dissatisfaction and non-sensuality separately in each partner; and infrequency and non-communication about sex within the couple. An overall score is also given, for the male and female partner separately, which gives an indication of the overall level of sexual functioning for each partner. A companion questionnaire, the Golombok Rust Inventory of Marital State (GRIMS) (Rust *et al.*, 1986, 1988a & b) gives an independent measure of the extent of any marital discord.

Reliabilities for the GRISS sub-scales average 0.74, and range between 0.61 for non-communication and 0.83 for anorgasmia. For the main scales the split-half reliabilities are 0.94 and 0.87 for the female and the male scales respectively. The GRIMS has a split half reliability of 0.91 for men and 0.87 for women.

The GRISS has been validated by comparing a group of 88 clinical couples, subdivided into specific dysfunctional groups as diagnosed by the therapists (impotence, premature ejaculation, vaginismus and anorgasmia), with a control group (a sample of 59 attenders at the clinic of a General Practitioner). All clinical groups differed significantly from the control group on their target sub-scales. For further validation, those individual subjects in the clinical group who had been diagnosed as having a problem had been compared with the GP control group. The overall female scale (point biserial $r=0.63$, $p<0.001$) and the overall male scale (point biserial $r=0.37$, $p<0.005$) were found to discriminate between the clinical and non-clinical groups. Another measure of validity was obtained within the clinical group by correlating the therapists' ratings of severity of problems with the overall male and female scales. The coefficients were $r=0.56$ for women and $r=0.53$ for men, both statistically significant. Follow-up validation of the main scales against therapists' estimates of improvement during therapy had also been carried out. The correlation between the therapists' ratings of improvement and the change in the main male score was 0.54 ($p=<0.005$) and 0.43 ($p=<0.01$) for women. The validation process for the GRIMS demonstrated correlations of 0.54 for men and 0.43 for women between the change in GRIMS scores during therapy and therapists' ratings of improvement.

Comparison of DSM-III(R), GRISS and GRIMS

A comparison between the GRISS profile and the DSM-III(R) diagnostic system is given in Table 1. Much of the asymmetry reflects the expected difference between diagnosis by psychometric profile and diagnosis by psychiatric interview. The former operates by breaking down the symptomology into a series of sub-scales, while the latter uses a series of all or none decisions under a tree decision structure. The systems match well for DSM-III(R) categories 301.71 (hypoactive sexual desire disorder), 301.72 (sexual aversion disorder), 302.72 male (male erectile disorder), 302.75 (premature ejaculation) and 306.51 (vaginismus). The GRIMS also gives a good and efficient assessment of the marital problems V code (V61.10). Ambiguity exists between 302.72 (female sexual arousal disorder) and 302.73 (inhibited female orgasm) which are separate in the DSM-III(R) classification but which are represented as different degrees of severity on the GRISS anorgasmia sub-scale. DSM-III(R) categories 302.74 and 302.76 do not appear in the GRISS. The first of these, 302.74 (inhibited male orgasm) represents the older diagnostic category of 'delayed ejaculation', which was found during the construction of the GRISS to be so rare in both clinical and general population samples that insufficient data was available to construct a sub-scale. The second, 302.76 (dyspareunia), represents either male or female pain on intercourse (unless due to vaginismus), and, as a medical condition, was not included within the GRISS specification. The DSM-III(R) diagnostic system, unlike the GRISS, makes no

special provision for particularly psychological aspects of sexual dysfunction, such as non-communication about sex, dissatisfaction with the sexual relationship, and lack of enjoyment of physical contact. It also has no direct measure of the frequency of sexual encounters.

Conclusions

The GRISS provides two sources of information which can help us in identifying the relationship between the Masters & Johnson stages and categories, and DSM-III(R) diagnosis. Firstly, because its construction makes use of a factor analytic model, it is able to show which items cluster together. Where there are high degrees of clustering it is more convenient to treat the underlying area of symptomatology as a spectrum disorder, with greater or lesser degrees of presence of some underlying condition. Any diagnostic system which artificially separates out different aspects of a common condition may be misleading. Thus, while failure to get an erection in the first instance may be different conceptually from the losing of an erection either during foreplay or intercourse, the way in which individuals report these instances do show that those who are prone to one such failure are prone to the other. Perhaps an alternative description for such correlations can be made within a skills based model, common within competency assessment generally (Rust & Golombok, 1988b). That is, if the task is specified as, for example, successful ejaculation, then various forms of erectile failure are stages along this path to success.

The second manner in which psychometric data can offer guidance comes from the data giving the actual correlations between particular sub-scales. In fact, the subscales of the GRISS are not independent from each other, and most show reasonable levels of inter-relatedness. A factor analysis of the twelve GRISS sub-scale scores for a group of couples showed that the data can be summarised within a two-factor solution (Rust & Golombok, 1986a), with one of the factors representing male dysfunction and the other female dysfunction. One noticeable aspect of the GRISS is that it contains no specific sub-scale dealing with sexual desire or level of interest in sex in general. The reason for this is simple. Although the sub-scales of the GRISS do reflect to some extent *a priori* conceptions of possible forms of variation in sexual behaviour, on the whole the sub-scale structure was an emergent property of the item analytic process. Those items dealing with sexual desire and general interest in sex were so highly correlated with the general male and female factors that they became identical with them. It thus seems from the empirical viewpoint provided by this psychometric approach that individual differences in overall aspects of sexual desire, sexual interest and sexual arousal are all related along a single continuum. If this is the case, then any attempt to separate them on the basis of *a priori* theoretical considerations, as suggested by DSM-III(R), is not particularly likely to have many practical consequences in terms of treatment. Disorders of desire, arousal and orgasm may be conceptually separate and represent temporally distinct phases, yet as part of a constantly interactive overall system it is unlikely that these aspects can usefully be treated in isolation.

References

- AMERICAN PSYCHIATRIC ASSOCIATION (1980) *The Diagnostic and Statistical Manual of Mental Disorders*, 3rd edn (Washington, D.C., APA).
- AMERICAN PSYCHIATRIC ASSOCIATION (1987) *The Diagnostic and Statistical Manual of Mental Disorders*, 3rd edn (revised) (Washington, D.C., APA).
- BENNUN, I., RUST, J. & GOLOMBOK, S. (1985) The effects of marital therapy on sexual satisfaction, *Scandinavian Journal of Behaviour Therapy*, 14(2), pp. 65-72.
- GOLOMBOK, S., RUST, J. & PICKARD, C. (1984) Sexual problems encountered in general practice, *British Journal of Sexual Medicine*, 11, pp. 171-175.
- KAPLAN, H.S., (1979) *Disorders of Sexual Desire* (New York, Brunner/Mazel).
- MASTERS, W.H. & JOHNSON, V.E. (1970) *Human Sexual Inadequacy* (Edinburgh, Churchill Livingstone).
- RUST, J. (1985) The measurement of sexual desire, *Proceedings of the 7th World Congress of Sexology, New Delhi, November 1985* (Bombay, Indian Association of Sex Educators, Counsellors & Therapists).
- RUST, J. (1988a) Sociobiology and psychometrics: do they really need each other? *Philosophical Psychology*, 1, pp. 117-129.
- RUST, J. (1988b) *The Rust Inventory of Schizotypal Cognitions (RISC)* (London, The Psychological Corporation).
- RUST, J., BENNUN, I., CROWE, M. & GOLOMBOK, S. (1986) The construction and validation of the Golombok Rust Inventory of Marital State, *Sexual and Marital Therapy*, 1, pp. 34-40.
- RUST, J., BENNUN, I., CROWE, M. & GOLOMBOK, S. (1988a) *The Golombok Rust Inventory of Marital State (GRIMS)* (Windsor, England, NFER-Nelson).
- RUST, J., BENNUN, I., CROWE, M. & GOLOMBOK, S. (1988b) The GRIMS: a psychometric instrument for the assessment of marital discord, in: W.L. YARBER & C.M. DAVIS (Eds) *Sexuality Related Measures: a compendium* (Lake Mills, Iowa, Graphic Publishing).
- RUST, J. & GOLOMBOK, S. (1985) The Golombok Rust Inventory of Sexual Satisfaction (GRISS), *British Journal of Clinical Psychology*, 24(1), pp. 63-64.
- RUST, J. & GOLOMBOK, S. (1986a) *The Golombok-Rust Inventory of Sexual Satisfaction (GRISS)* (Windsor, England, NFER-Nelson).
- RUST, J. & GOLOMBOK, S. (1986b) The GRISS: a psychometric instrument for the assessment of sexual dysfunction, *Archives of Sexual Behaviour*, 15(2), pp. 153-161.
- RUST, J. & GOLOMBOK, S. (1988a) The GRISS: a psychometric scale and profile of sexual dysfunction, in: W.L. YARBER & C.M. DAVIS (Eds) *Sexuality Related Measures: a compendium* (Lake Mills, Iowa, Graphic Publishing).
- RUST, J. & GOLOMBOK, S. (1988b) *Modern Psychometrics* (London, Routledge & Kegan Paul).
- RUST, J. & GOLOMBOK, S. & COLLIER, J. (1988) Marital problems and sexual dysfunction: how are they related? *British Journal of Psychiatry*, 152 (in press).
- RUST, J. & GOLOMBOK, S. & PICKARD, C. (1987) Marital problems in General Practice, *Sexual and Marital Therapy*, 2, pp. 127-130.
- SCHOVER, L.R., FRIEDMAN, J.M., WEILER, S.J., HEIMAN, J.R. & LO PICCOLO, J. (1982) Multiaxial problem-oriented system for sexual dysfunctions, *Archives of General Psychiatry*, 39, pp. 614-619.
- WORLD HEALTH ORGANIZATION (1978) *Mental Disorders: Glossary and Guide to Their Classification in Accordance with the Ninth Revision of the ICD* (Geneva, Switzerland, World Health Organization).