

## The Five-Factor Model of Personality and Sexual Functioning in Outpatient Men and Women

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### ABSTRACT

454 adults seeking evaluation at a sexual behaviors consultation clinic were evaluated for the major dimensions of personality as measured by the NEO Personality Inventory and various aspects of sexual attitudes and experiences via the Derogatis Sexual Functioning Inventory. The results showed that elevated Neuroticism was correlated with dysphoric symptoms, negative body image and lowered satisfaction. More extraverted individuals reported increased drive, more sexual experience, positive body image, and more positive affects. Agreeableness was unrelated to sexual drive and satisfaction but was negatively related to symptomatology. Openness was positively associated with amount of Information, range of sexual experiences, liberal attitudes toward sex, sexual drive and fantasy and

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appears to broadly impact upon sexual functioning. The more conscientious subjects had lowered sexual drive, but fewer dysphoric symptoms and a better body image. Women showed a similar pattern of personality correlates with the exception that personality was unrelated to females' sexual experiences and sexual satisfaction. The present findings support and expand previous research and contribute to our understanding of how personality dispositions influence the experience and expression of sexual functioning in male and female clinical samples.

## INTRODUCTION

An important avenue of research in the area of sexuality concerns the identification of personality correlates of sexual functioning. Such an approach attempts to better understand those personality traits that both influence sexual expression and modulate the amount of satisfaction derived from it. The purpose of this report is to examine the relations between the personality dimensions of the five-factor model and descriptions of sexual functioning.

Historically the concept of sexuality (broadly defined here to include such concepts as gender identity, sex roles, sexual functioning, and sexual attitudes) occupies a singularly important place in psychology. Freud's<sup>1</sup> pioneering work emphasized sexuality as the driving force of psychological development and the resulting intrapsychic structures were designed to accommodate these needs in socially appropriate ways were seen as the elements of personality. Viewed from either a psychoanalytic view of personality development or learning theory<sup>2,3</sup> it is clear that aspects of sexuality (e.g., gender identity) are established early in life and carry with them important implications for one's later socialization.<sup>4</sup> In fact, others' perceptions of one's sexuality also influence how they come to interact with us,<sup>5,6</sup> and the style of these interactions can also influence our own personality development.

Interest in sexuality cuts across many disciplines because sexuality influences behavior in both direct and indirect ways. Trait psychology is no exception to this interest. Sexuality represents another area of human functioning where the interplay of individual-difference factors can be assessed and evaluated. Just as traits have been shown to influence such life dimensions as well-being, health, and job satisfaction, among others, it is not unreasonable to hypothesize similar associations with aspects of sexuality. In fact, many of the same personality dispositions that influence the quality of life in these other areas should also affect how individuals come to express and enjoy their sexuality. This report will not review the rich psychoanalytic literature which utilizes a case-history or idiographic perspective but will focus upon the empirical data derived from trait psychology.

### THE FIVE-FACTOR MODEL AND SEXUAL FUNCTIONING

The five-factor model represents an empirically-derived, comprehensive, and robust taxonomy of personality traits.<sup>7</sup> Research conducted over the past 5 decades has shown that most trait adjectives can be understood in terms of the five basic dimensions of Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C).<sup>8</sup> These domains have been repeatedly recovered from both self and peer ratings.<sup>9</sup> Although specifically developed from a trait perspective, the model is able to accommodate the information provided by constructs developed from other traditions, including Murray's needs, Jungian typologies, Gough's folk concepts, Berne's transactional analysis constructs, and interpersonal variables.<sup>10-14</sup> These five factors have also been found to be useful in explaining personality pathology as well.<sup>15,16</sup> The model has also been shown to predict a number of important life-outcomes, including well-being, coronary heart disease, and job satisfaction.<sup>17,18</sup>

The real value of the five-factor model is that it provides a description of the entire sphere of personality functioning. As a taxonomy it can orient researchers to relevant aspects of personality and provide an interpretive context for evaluating their findings. Because the five-factor model is comprehensive, it is able to embrace a wide range of constructs and can thus serve a meta-analytic function by synthesizing numerous lines of inquiry. By meaningfully aggregating research findings, the five-factor model can be useful in spotting redundancy and for identifying new (or overlooked) avenues of investigation.

The majority of the research with sexuality has focused on the personality domains of N and E. Using his 3 factor model of personality (Neuroticism (N), Extraversion (E), and Psychoticism (P)), Eysenck<sup>19</sup> has shown over the years that personality characteristics were indeed linked to sexual functioning. For example, Eysenck<sup>20</sup> found that both males and females high on Neuroticism had lower reported levels of sexual experience. Those high on Extraversion, particularly males, had much more experience, particularly in regard to petting and intercourse. Individuals high on Psychoticism, most notably females, reported greater involvement with coital and oral activities. It should be noted that analyses by Howarth<sup>21</sup> and McCrae and Costa<sup>22</sup> suggest that P is a dimension that measures impulsiveness or low C and uncooperativeness or low A.

The N and E dimensions are readily understood and the results are consistent with their formulations. For example, Eysenck<sup>23</sup> argued that the concept of hysteria can be understood in terms of high N and high E. In a sample of college students such individuals were found to have stronger libidinal drives and more sexual activity than individuals low on both N and E. Despite such an involved sex life, these "hysterics" experienced more guilt and sexual dissatisfaction than their more stable and introverted counterparts.<sup>23</sup> Rosenheim and Neuman<sup>24</sup> found that anxiety and vulnerability, aspects of N, characterized sexually dysfunctioning

males, while Kupfer, Rosenbaum and Detre<sup>25</sup> also noted higher levels of impulsivity among psychiatric outpatients who reported problems with sexual functioning. Clearly, the negative affectivity associated with N inhibits one from engaging in intimate activities, while the positive affectivity of E facilitates such actions.

However, the findings associated with P can be understood as reflecting low C and low A.<sup>22</sup> Rather than reflecting some psychotic process, the higher sexual activity of these high P females is consistent with the self-centered, manipulative and antagonistic interpersonal orientation that such scores reflect. Low A women may see sexual activity as a means to an end rather than as an opportunity for emotional bonding. In fact, the higher incidence of oral activities may be revealing of these women's desire to be in control of any sexual situation and to remain emotionally detached from their partners.

Schenk and Pfrang<sup>26</sup> partially replicated Eysenck's findings in a young group of German Army recruits. They found that E correlated with first intercourse at an earlier age, more sexual partners, and a greater frequency of sexual contact. High E individuals are person-oriented, sociable, and active individuals who seek out the company of others and relationships with them. Schenk and Pfrang also included measures of low A (e.g., Aggression) and found them related to experiencing sex at an earlier age, more sexual partners, and greater sexual frequency as well. Again, antagonistic individuals are out for their own ends and are willing to use and manipulate others to attain their goals and this includes the gratification of their own needs. Further, the sexually facilitative effects of low A were enhanced if an individual was also high on E: Extraverted-Antagonists had even more sexual experiences. The confluence of E and A is not surprising because these two dimensions also define the interpersonal circumplex.<sup>14,27</sup> E represents the amount of "energy" an individual may have to invest in interpersonal activities and A represents the orientation of the individual toward these activities, from other-oriented to self-oriented. Any interpersonal activity should, at the very least, be correlated with these two factors. The linkage of E and A within the five-factor taxonomy provides a cohesive model for interpreting the style, tempo, and quality of these interpersonal processes.

It is also recognized that society continues to influence how sexuality is expressed and all of us are well aware of the differing sexual expectations that exist for males and females.<sup>28</sup> Although these forces are subtle and nonspecific, they do influence behavior to some degree. It is therefore of interest to examine how the same personality dimension may be expressed in gender-specific ways. For example, low A in females may lead to a perception of sexuality as a means to an end. Such women may engage in sex at an earlier age because they realize that it provides them with access to desirable resources. The finding that such females engage more frequently than their high A counterparts in oral sex may suggest attempts at keeping some degree of physical and/or emotional distance from their partners. In males, on the other hand, low A may reflect a self-centered attempt at gratifying personal needs for sexual satisfaction. The frequent sexual activity with

numerous partners, for both sexes, may reflect another characteristic of low A individuals: their perceptions of others as objects.

The dimension of Conscientiousness may provide another example of the gender-specific expressions of personality in sexual functioning. High C individuals are organized, persistent, and motivated to compete against socially commendable standards of excellence. Whereas society does maintain certain social and interpersonal expectations for males and females, high C individuals should be the most likely to internalize these gender-specific values. Farley, Nelson, Knight, and Garcia-Colberg<sup>29</sup> included a measure of need for achievement, a facet of C, in their study. They noted that high achievement males had less sexual frustrations, were less conflicted over sex, and had greater sex-role confidence. Corresponding females were found to have a lower interest in sex, be more sexually repressed, and have experienced more sexual frustrations. Clearly society calls for males to be the initiator of and leader in all intersex interactions. Awareness of and experience with these social proscriptions may provide high C males with a general sense of social efficacy. Females, on the other hand, are expected to be more demure about their sexuality. They are the ones called upon to be more in control of their sexual desires and to be more circumspect in heterosexual encounters.

Finally, given the experiential and informational aspects of sexuality, one's receptivity to novelty, or Openness, should provide another descriptive dimension. Joe and Smith<sup>30</sup> and Schenk and Pfrang<sup>26</sup> noted that conservative and dogmatic, or low O, individuals had less knowledge of sexual functioning and fewer sexual experiences. Individuals closed to new experiences with a narrow range of interests would certainly be reluctant to explore areas of functioning outside of their immediate and familiar surroundings.

Clearly all five personality dimensions are useful in explaining sexual functioning. Further, some of these dimensions may also have some gender-specific implications. What this review underscores is the interpretive power of the five-factor model. Despite the wide variety of constructs employed in the above research, from anxiety and dominance to clericalism, aggression, and achievement motivation, a meaningful synthesis can be constructed when these variables are discussed in the wider context of the five-factor model.

However, there is a major limitation to this research: the measures of sexual functioning included in these studies were limited to one or two areas, namely the amount and/or type of sexual functioning. Although very direct indices, these questions miss other salient aspects of sexuality such as the cognitive, affective, or attitudinal elements. Sexuality is a complex, multidimensional construct that needs to be assessed as such if one is to gain a comprehensive understanding of an individual's level of functioning. Relating such an instrument of sexuality to the five major dimensions of personality would provide a broad-based assessment of personality characteristics associated with the gamut of sexual functioning. The next section outlines the development and utility of such a measure.

### THE DEROGATIS SEXUAL FUNCTIONING INVENTORY

In an attempt to capture the multidimensional nature of sexual functioning, the Derogatis Sexual Functioning Inventory (DSFI) was developed. This instrument provides for a wide-angled evaluation of an individual's sexuality and can provide the clinician with insights into the diagnostic, prognostic, and treatment-outcome questions that surround therapy.<sup>31</sup>

The DSFI attempts to measure the affective, behavioral, cognitive, and social aspects of sexuality. Research has shown support for the measure in terms of its psychometric qualities and clinical relevance<sup>31-34</sup> although some limitations have been noted (cf. Segraves, Schaenberg, Zarins, Knopf, and Camic<sup>35</sup>). Although initially normed on a normal, heterosexual sample, the DSFI has also been useful in describing a variety of clinically relevant groups, including transvestites, transsexuals, depressed males, and diabetic women.<sup>33,36-38</sup>

For example, Derogatis and Meyer<sup>31</sup> showed that males and females classified as having a sexual dysfunction had higher levels of psychological distress and dysphoric affect than normals. Lower levels of sexual information were also noted for this group. Dysfunctional males revealed lower sexual drive levels and a more limited repertoire of sexual experiences. On the other hand, female dysfunctionals were noted as having a richer sexual fantasy life and more varied sexual experiences. This work demonstrates that sexual difficulties, disorders, and dysfunctions carry with them specific psychosexual profiles that can be meaningfully portrayed in the multidimensional space of the DSFI. Further nosological and clinical insights can be garnered by examining specific items.

The success of the DSFI can be directly related to its attempt at more clearly specifying the many elements of sexual functioning. The DSFI has gone a long way in creating a catalogue of sexual variables, and the purpose of this report is to show the relations between these varied dimensions of sexuality and the five-factor model of personality. Given the current conceptualizations of these five factors, hypotheses can be generated that relate these dimensions to the aspects of sexuality captured by the DSFI. It is expected that N would be related to greater sexual dissatisfaction, negative affect, and increased symptomatology; E should relate to positive affect, greater sexual satisfaction, and more sexual experiences; O is hypothesized to relate to higher Information and Fantasy scores; A with lower symptomatology and more positive affect; and C should correlate with a more masculine role orientation and lower symptomatology.

### METHOD

#### Subjects

Subjects consisted of 454 adults (163 women, 291 men) between the ages of 17 and 71 (Mean = 40) who presented themselves to the Sexual Behaviors Con-



sultation Unit (SBCU) at the Johns Hopkins Medical Institution for evaluation and/or treatment for a sexual problem. The unit has been described previously.<sup>39</sup> Most of the subjects met DSM III-R criteria for Axis I sexual dysfunction or sexual disorders, with erectile dysfunction, premature ejaculation being common dysfunctions and transvestism the modal paraphilia. The actual number of subjects per analysis may vary due to missing data. Sixty percent were married at the time of testing, 22% single, and the remaining 18% being either separated, divorced, widowed, or living with someone.

## Measures

**Derogatis Sexual Functioning Inventory (DSFI).** This is a self-report omnibus scale of psychosexual behavior designed to measure the current level of sexual functioning of the respondent. The DSFI is comprised of 255 distinct items which reflect measurement along 10 primary dimensions: Information, Experiences, Drive, Attitude, Symptoms, Affects, Gender Role, Fantasy, Body Image, and Satisfaction. Evaluations of the DSFI have shown the instrument to possess a degree of reliability and validity relative to the measurement of quality of sexual functioning.<sup>31</sup>

**NEO-Personality Inventory (NEO-PI).** This is a 181 item questionnaire developed through rational and factor analytic methods in a series of studies using adult volunteers ranging in age from 20 to 90 years. In addition to the global domain scales measuring N, E, O, A, and C, there are 18 subscales measuring six specific facets of N, E, and O. (Facet scales for A and C are under development and will result in a 240-item instrument.) Brief descriptions of the domains are as follows:

Neuroticism reflects the degree to which individuals are prone to experience chronic psychological distress and such emotions as anxiety, depression, and anger; it is also associated with demoralization, low self-esteem, somatic complaints, irrational thoughts, an inability to control urges and impulses, and ineffective coping styles. N is a central component of many scales measuring various forms of psychopathology. Individuals low on this dimension are calm, well-adjusted, emotionally stable, and emotionally resilient.

Extraversion reflects the degree to which individuals are sociable, lively, and cheerful. It is associated with positive emotions, high self-esteem, interpersonal assertiveness, high activity level, enjoyment of excitement and outgoingness. Individuals low on this dimension are reserved and serious; they may or may not be introspective. As a dimension of interpersonal behavior, E refers primarily to the quantity of social stimulation preferred, regardless of the quality of the interaction.

Openness to Experience reflects the degree to which individuals are prone to

seek out and appreciate varied experiences. It is most familiar as intellectual curiosity, but is also seen in active imagination and creativity, in preference for variety and novelty, in highly differentiated affective reactions, in aesthetic appreciation and responsiveness and in liberal value systems. Individuals high on this dimension have a broader scope of awareness, more intense absorption in experience, and more permeable boundaries of consciousness. Individuals low in O are conventional, down-to-earth, unimaginative, and rigid.

Agreeableness reflects the degree to which individuals are trusting, cooperative, and sympathetic. As a dimension of interpersonal behavior, A represents the characteristic quality of interaction, from self-centered arrogance to altruistic warmth and nurturance. Individuals high in A tend to be trusting and sentimental; those low in A tend to be cynical, rude, suspicious, uncooperative, manipulative and tough-minded.

Conscientiousness reflects the degree to which individuals are scrupulous, hard-working, and well-organized. Individuals high on this dimension are neat, punctual, and exacting; they have high levels of self-discipline. They are also achievement-oriented, working long and hard to achieve well-defined goals. Individuals low in C are disorganized, lackadaisical, and unmotivated; they tend to be hedonistic and easily bored.

Items are answered on a 5-point scale ranging from "strongly agree" to "strongly disagree" and scales are balanced to control for acquiescence. The internal consistency reliabilities of the 8-item facet scales ranged from .64 to .85; coefficient alphas for the longer N, E, O, A, and C scales were .93, .87, .89, .76, and .86.<sup>40</sup> Longitudinal retest of the original normative sample over 3 and 6 year intervals showed scores for adults are extremely stable, with retest coefficients ranging from .63 to .83.<sup>40</sup> More recent reviews of the NEO-PI have been offered by Hogan<sup>41</sup> and Leong and Dollinger.<sup>42</sup>

### Procedure

All patients presented to the SBCU between January 1988 and December 1989. During the initial evaluation all subjects completed the DSFI and NEO-PI, among other instruments.

## RESULTS

### Psychometric Qualities of DSFI

Table 1 presents Cronbach's Alpha Coefficients for each of the DSFI scales. As can be seen, reliabilities are mostly very good with the exception of the Infor-



**TABLE 1**  
**Alpha Reliabilities for DSFI Scales**

| DSFI Scale       | $\alpha$ | N   |
|------------------|----------|-----|
| Information      | .32      | 283 |
| Experience       | .93      | 284 |
| Drive            | .59      | 283 |
| Attitude         |          |     |
| Liberal          | .77      | 281 |
| Conservative     | .80      | 281 |
| Symptoms         | .97      | 282 |
| Positive Affects | .94      | 281 |
| Joy              | .88      | 281 |
| Content          | .85      | 281 |
| Vigor            | .85      | 281 |
| Affection        | .82      | 281 |
| Negative Affects | .94      | 281 |
| Anxiety          | .80      | 281 |
| Depression       | .87      | 281 |
| Guilt            | .89      | 281 |
| Hostility        | .83      | 281 |
| Gender Role      |          |     |
| Masculine        | .87      | 278 |
| Feminine         | .81      | 278 |
| Fantasy          | .85      | 280 |
| Body Image       |          |     |
| Males            | .82      | 169 |
| Females          | .83      | 109 |
| Satisfaction     | .63      | 278 |

mation scale. An examination of the items of this scale indicate that it assesses more than just information, since there is a very strong attitude component as well. Items such as "Simultaneous orgasm is not necessary for a good sexual relationship," "Masturbation by either partner is an indicator of poor marital adjustment," and "A male's orgasm is more satisfying than a female's orgasm" are less tied to an empirical information base than items such as: "A woman can become pregnant during menstruation," "Usually men achieve orgasm more quickly than women," and "Men reach the peak of their sexual drive in their late teens while women reach their peak during their 30's." This discrepancy may be adversely affecting the reliability of this scale.

#### Personality Correlates of Sexuality

Table 2 presents the correlations between the DSFI scales and the NEO-PI dimensions for males. As can be seen, the varied aspects of sexual functioning

Table 2  
Correlations of NEO-PI Domains and Facets with DSFI Scales for Men

| NEO-PI Scale               | DSFI Scale  |            |       |          |              |          |          |          |           |          |         |            |              |
|----------------------------|-------------|------------|-------|----------|--------------|----------|----------|----------|-----------|----------|---------|------------|--------------|
|                            | Information | Experience | Drive | Attitude |              | Symptoms | Affect   |          | Role      |          | Fantasy | Body Image | Satisfaction |
|                            |             |            |       | Liberal  | Conservative |          | Positive | Negative | Masculine | Feminine |         |            |              |
| <b>NEUROTICISM FACETS</b>  |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Anxiety                    | -.09        | -.17**     | -.02  | -.09     | .11          | .60**    | -.40**   | .59**    | -.24**    | .08      | .07     | .32**      | -.20**       |
| Hostility                  | -.09        | -.06       | .02   | .01      | .08          | .46**    | -.29**   | .43**    | -.17**    | -.03     | .08     | .27**      | -.12         |
| Depression                 | -.16**      | -.20**     | .04   | -.14**   | .17**        | .69**    | -.46**   | .65**    | -.35**    | .02      | .04     | .44**      | -.31**       |
| Self-Consciousness         | -.11        | -.20**     | .07   | -.05     | .12*         | .54**    | -.31**   | .48**    | -.36**    | .01      | .16*    | .40**      | -.30**       |
| Impulsiveness              | .03         | .13*       | .15*  | .02      | -.04         | .37**    | -.07     | .32**    | -.07      | .13*     | .18**   | .23**      | -.04         |
| Vulnerability              | -.19**      | -.15*      | -.07  | -.17**   | .15*         | .59**    | -.42**   | .55**    | -.50**    | -.05     | .04     | .40**      | -.24**       |
| <b>EXTRAVERSION FACETS</b> |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Warmth                     | -.05        | .11        | .11   | .10      | -.10         | -.24**   | .39**    | -.23**   | .32**     | .32**    | .01     | -.29**     | .17**        |
| Gregariousness             | -.09        | .16**      | .12*  | -.03     | -.01         | -.26**   | .24**    | -.16**   | .19**     | .13*     | -.04    | -.28**     | .13*         |
| Assertiveness              | .06         | .22**      | .13*  | .19**    | -.22**       | -.25**   | .26**    | -.26**   | .53**     | .13*     | .03     | -.31**     | .15**        |
| Activity                   | -.04        | .13*       | .13*  | .06      | -.06         | -.04     | .13*     | -.02     | .36**     | .08      | .10     | -.26**     | .06          |
| Excitement Seeking         | .05         | .15*       | .14*  | .21**    | -.16**       | .04      | .14*     | -.03     | .25**     | .15*     | .25**   | -.24**     | .08          |
| Positive Emotions          | .12*        | .20**      | .19** | .21**    | -.19**       | -.38**   | .50**    | -.32**   | .31**     | .29**    | .10     | -.31**     | .21**        |
| <b>OPENNESS FACETS</b>     |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Fantasy                    | .18**       | .18**      | .36** | .19**    | -.28**       | .22**    | -.04     | .17**    | .07       | .23**    | .37**   | .06        | -.09         |
| Aesthetics                 | .10         | .13*       | .13*  | .13*     | -.13*        | .03      | .10      | .09      | .16**     | .28**    | .20**   | -.08       | .05          |
| Feelings                   | .05         | .19**      | .18** | .15*     | -.18**       | .12      | .10      | .12      | .24**     | .34**    | .19**   | -.09       | .11          |
| Actions                    | .24**       | .12        | .11   | .17**    | -.23**       | -.08     | .17**    | -.13*    | .16**     | .12      | .22**   | -.15*      | .05          |
| Ideas                      | .22**       | .12        | .17** | .18**    | -.23**       | -.11     | .11      | -.07     | .23**     | .15*     | .17**   | -.13*      | .05          |
| Values                     | .42**       | .25**      | .18** | .39**    | -.52**       | -.11     | .18**    | -.16*    | .26**     | .15*     | .25**   | -.15*      | .04          |
| <b>DOMAINS</b>             |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Neuroticism                | -.14*       | -.14*      | .05   | -.10     | .13*         | .71**    | -.44**   | .66**    | -.37**    | .04      | .12     | .45**      | -.27**       |
| Extraversion               | .01         | .23**      | .21** | .19**    | -.20**       | -.27**   | .40**    | -.24**   | .48**     | .27**    | .11     | -.42**     | .22**        |
| Openness                   | .28**       | .24**      | .28** | .28**    | -.37**       | .02      | .14*     | .02      | .27**     | .33**    | .34**   | -.13*      | .04          |
| Agreeableness              | .17**       | .07        | .06   | .07      | -.12         | -.31**   | .24**    | -.26**   | .09       | .12*     | -.01    | -.16**     | .07          |
| Conscientiousness          | -.04        | .00        | -.06  | .10      | .01          | -.27**   | .24**    | -.27**   | .43**     | .09      | -.07    | -.28**     | .19**        |

\*  $p < .05$ ; \*\*  $p < .01$ ;  $N = 260$ .

(both cognitive and behavioral) can be meaningfully understood within the context of personality functioning. For example, Symptoms, Negative Affect, Poor Body Image and lower satisfaction all correlate with N; Positive Affect, Masculinity, and a Positive Body Image correlate with E; Information, Range of Sexual Experiences, Drive, and Liberal Attitudes toward sex are related to O; high Positive Affect and low Negative Affect are associated with A; and Masculinity and Satisfaction are related to C. These associations portray sexuality as a broad-based element of human functioning; it draws on all elements of one's personality.

Table 3 provides DSFI-NEO-PI correlations for females. As can be seen a similar pattern of correlates emerges. Clearly, personality impacts sexual functioning similarly for males and females. However, there are two noticeable differences. First, it is interesting to note that there are few, in fact, only two personality correlates of the DSFI Experience scale. Women who are high on NEO-PI Self-consciousness scale (i.e., who are more ashamed, feel inferior and are easily embarrassed) tend to have lower sexual experience than those with low Self-Consciousness scores while Women who are high on NEO-PI Activity (i.e. who are more energetic, fast-paced and vigorous) tend to have greater sexual experience than women with lower Activity scores. Second, none of the 18 facet scores nor any of the five domain scores of the NEO-PI correlate significantly with the degree of women's sexual satisfaction. Interestingly, when women are contrasted in terms of high and low DSFI scores (mean-level splits), sexual Satisfaction scores are not significantly influenced by greater experience, drive, information or any of the other DSFI scales. These two elements of female sexuality may be role-dependent; a traditional woman's role discourages vigorous proactive seeking of sexual experiences and encourages a more passive, receptive role sexually. This role orientation may suggest that the female qualities that motivate males to initiate sexual contact may be less tied to personality than to other features (e.g., physical attractiveness). It is also possible that the degree of a woman's satisfaction with sex may be more influenced by the quality of the marital or sexual relationship than by her personality. Future research should examine the nature and quality of the dyadic relationship as it interacts with the personality of the partners and its influence on women's sexual satisfaction.

These results complement those for males, who have a more proactive role. Here, the extent of sexual experience is related to the male's level of E (an ability to interact successfully with others, to form emotionally satisfying relationships with others) and O (a proactive seeking of new and different experiences), qualities that underlie a male's ability to go out and attract the attentions of women in wide range of situation. Male sexual satisfaction is also related to their levels of E and of C (persevering, motivated, lives up to external expectations), qualities that enable a male to emotionally bond with another and to be concerned about their needs.

Table 3  
Correlations of NEO-PI Domains and Facets with DSFI Scales for Women

| NEO-PI Scale               | DSFI Scale  |            |       |          |              |          |          |          |           |          |         |            |              |
|----------------------------|-------------|------------|-------|----------|--------------|----------|----------|----------|-----------|----------|---------|------------|--------------|
|                            | Information | Experience | Drive | Attitude |              | Symptoms | Affect   |          | Role      |          | Fantasy | Body Image | Satisfaction |
|                            |             |            |       | Liberal  | Conservative |          | Positive | Negative | Masculine | Feminine |         |            |              |
| <b>NEUROTICISM FACETS</b>  |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Anxiety                    | -.18*       | -.15       | .00   | -.02     | .04          | .48**    | -.29**   | .46**    | -.32**    | .03      | .12     | .15        | -.07         |
| Hostility                  | -.15        | .00        | .10   | -.05     | .06          | .41**    | -.25**   | .38**    | .05       | .06      | .10     | .09        | -.04         |
| Depression                 | -.19*       | -.05       | .13   | -.04     | .10          | .61**    | -.33**   | .58**    | -.21*     | .05      | .21*    | .26**      | -.09         |
| Self-Consciousness         | -.31**      | -.19*      | -.02  | -.10     | .22**        | .38**    | -.23**   | .35**    | -.24**    | -.02     | .04     | .38**      | .04          |
| Impulsiveness              | .10         | .13        | .06   | .10      | -.06         | .34**    | -.15     | .30**    | -.06      | .07      | .26**   | .22**      | -.12         |
| Vulnerability              | -.14        | .01        | .00   | -.09     | .10          | .52**    | -.44**   | .45**    | -.39**    | -.06     | .05     | .16        | -.07         |
| <b>EXTRAVERSION FACETS</b> |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Warmth                     | .10         | -.10       | .10   | .19*     | -.06         | -.03     | .40**    | .03      | .22**     | .47**    | .04     | -.18*      | .11          |
| Gregariousness             | -.08        | -.02       | .03   | .03      | .02          | -.06     | .14      | .11      | .11       | .18*     | .11     | -.09       | -.04         |
| Assertiveness              | .02         | .08        | .09   | .12      | -.17*        | -.07     | .14      | -.10     | .54**     | .18*     | .07     | -.07       | -.01         |
| Activity                   | .00         | .16*       | .05   | .02      | -.02         | .02      | .13      | -.02     | .30**     | .04      | .16*    | .14        | -.13         |
| Excitement Seeking         | -.26**      | -.13       | .10   | .13      | .04          | .23**    | -.03     | .19*     | .26**     | .30**    | .16     | -.10       | -.06         |
| Positive Emotions          | .22**       | .05        | .10   | .26**    | -.18*        | -.19*    | .45**    | -.16*    | .30**     | .36**    | .10     | -.24**     | .06          |
| <b>OPENNESS FACETS</b>     |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Fantasy                    | .27**       | .09        | .23** | .31**    | -.12         | .17*     | .19*     | .20*     | .08       | .31**    | .31**   | -.07       | .06          |
| Aesthetics                 | .20*        | .04        | .19*  | .30**    | -.20*        | .09      | .39**    | .13      | .24**     | .41**    | .15     | -.14       | .09          |
| Feelings                   | .29**       | .06        | .22** | .28**    | -.26**       | -.01     | .32**    | .09      | .34**     | .34**    | .27**   | -.17*      | .03          |
| Actions                    | .30**       | .13        | .19*  | .20*     | -.24**       | -.11     | .21**    | -.03     | .24**     | .21*     | .15     | -.15       | -.06         |
| Ideas                      | .27**       | .03        | .15   | .27**    | -.31**       | -.10     | .25**    | -.07     | .36**     | .20*     | .10     | -.22**     | .01          |
| Values                     | .34**       | .13        | .14   | .45**    | -.45**       | .04      | .16      | .08      | .18*      | .11      | .16     | -.16       | -.11         |
| <b>DOMAINS</b>             |             |            |       |          |              |          |          |          |           |          |         |            |              |
| Neuroticism                | -.19*       | -.06       | .07   | -.01     | .09          | .61**    | -.37**   | .57**    | -.23**    | .04      | .17*    | .28**      | -.07         |
| Extraversion               | .00         | .00        | .13   | .20*     | -.09         | -.03     | .34**    | .02      | .48**     | .42**    | .18*    | -.15       | -.01         |
| Openness                   | .38**       | .11        | .26** | .42**    | -.36**       | .03      | .35**    | .10      | .33**     | .37**    | .27**   | -.20*      | .02          |
| Agreeableness              | .07         | -.06       | -.15  | .10      | -.05         | -.29**   | .37**    | -.15     | -.02      | .18*     | -.07    | -.03       | .02          |
| Conscientiousness          | -.06        | -.14       | -.17* | -.10     | .04          | -.33**   | .19*     | -.26**   | .23**     | -.01     | -.15    | .02        | .09          |

\*  $p < .05$ ; \*\*  $p < .01$ ;  $N = 152$ .

## DISCUSSION

### Neuroticism

N reflects emotional distress and instability; the capacity of an individual to experience negative affect. As such, it is not surprising that the largest correlates of this scale are Symptoms and Negative Affect; also not surprising are variables in the DSFI reflecting overall satisfaction as in negative Body Image and lowered Sexual Satisfaction. The Symptoms and Negative Affect scales address more general non-sexual domains. Concerning the more sexually relevant scales, it appears that Self-Consciousness and Depression facets are important. High scorers on these scales appear to avoid sexual contacts in their lives in terms of lower sexual information scores, less varied sexual experiences, and a more conservative or constricted view of sexuality. The question can be raised as to the causal nature of this package of correlations. Do these individuals feel uncomfortable with themselves and therefore shun intimate, interpersonal contacts that may serve to exacerbate their personal sense of inadequacy; or does sexual intimacy (and possible failures therein) create the affective distress?

### Extraversion

E reflects the tempo and style of one's interpersonal orientation. This is a broad construct reflecting not only affiliative and bonding capacities, but also energy levels and social ascendance. Individuals uniformly high on E are not only outgoing, friendly, affiliative, and easy to approach, but they are also dominant, fast-paced individuals looking "for a good time." It is also not surprising, then, to note that high E individuals have more sexual experiences, more sexual drive, more positive affect, and feel good about the way they appear. It is also interesting to note that both the masculine and feminine roles are associated with E. However, a closer examination of the facets show that these roles are correlated with different aspects of the dimension. The masculine role correlates with the dominant and active facets while femininity correlates more with the affiliative, emotional bonding facets. Further, the warmth and positive emotions facets seem to be most relevant to the positive affect scales of the DSFI (i.e., Positive Affect, Positive Body Image, Sexual Satisfaction). Clearly interpersonal involvement underlies one's sense of well-being.

### Openness

O reflects the degree of proactive seeking of new experiences and the enjoyment of experience for its own sake. High O individuals are receptive to new ideas

and are sometimes seen by others as unconventional. High O individuals score higher on the Information scale, have more varied sexual experiences, have higher drive levels, are more liberal and less conservative in their sexual attitudes, and more varied sexual fantasy lives. O appears to have a broad impact on sexual functioning, specifically, when O correlates with a DSFI scale, all facets are contributing to this association. O appears to represent a much overlooked variable in research on sexuality. Unlike high N individuals whose emotional dysphoria undermines sexual initiatives, low O individuals would shun such contact less out of affective distress as a lack of interest in unfamiliar activities. A lack of interest in novelty leads these individuals to ignore the unfamiliar or unconventional.

### **Agreeableness**

A represents the quality of one's interpersonal orientation on a continuum from a very tender-minded, altruistic view to a more tough-minded, antagonistic view. Clearly this dimension should have something in common with E, and it does. Both of these variables combine to define what is known as the Interpersonal Circumplex, a model that outlines the continuum of interpersonal styles. Both of these dimensions should be related to sexuality given its interpersonal nature. However, there are fewer correlations, and of lower magnitude, than found with E. This suggests that this dimension may be less relevant in predicting sexual outcomes. For example, A is not associated with the number of sexual experiences, sexual drive, attitudes towards sex, and self and sexual satisfaction. Clearly, A does not play a significant role in one's ability to experience their sexuality. However, it is relevant to more general issues of positive affect and lower symptomatology.

### **Conscientiousness**

C represents one's degree of organization, persistence, and motivation in goal directed behaviors. Like A, it has relatively little to do with sexuality. High C individuals appear emotionally robust and content. They have fewer symptoms, more positive affect and less negative affect, more masculine role and in males only, a more positive body image, and higher levels of sexual satisfaction. Of interest is that high C individuals tend to report lower sexual drive levels. Given the planful goal-directedness of these individuals, they may see the immediate gratification of sex as a distraction from their larger, more long range goals.

In summary, this report both supports and expands previous data about the relationship between personality traits and dimensions of sexual attitudes, drive and experience. It suggests that N exerts a significant influence upon sexual



attitudes, drive and activity as does Extraversion in directing energy towards interpersonal activities of which sexuality is a chief one. The facets of E underscore basic gender differences with more gregarious, assertive, and excitement-seeking males having greater sexual experiences and drives, while females show no such links between their sexual experiences and drives and their extraversion, specifically their standing on the facets of gregariousness, assertiveness and excitement-seeking. Though not strongly related to the dimensions of sexual functioning tapped by the DSFI, Agreeableness-Antagonism can be added to Extraversion to form the interpersonal circumplex and offer an important perspective on sexuality. Finally, the role of O and C also modify the variety of sexual themes, attitudes and activities reflected with the DSFI. This report underscores the necessity to consider the basic five personality dimensions in understanding sexuality both in normative and pathological states and in non-treatment seeking or community-dwelling adults.

#### REFERENCES

1. Freud S: An outline of psychoanalysis. New York, W.W. Norton, 1940/1969
2. McConaghy N: A learning approach. In Greer JH, ODonoghue WT (eds): *Theories of Human Sexuality*. New York, Plenum, 1987
3. Money J: *Lovemaps: Clinical Concepts of Sexual-Erotic Health and Pathology, Praphilia and Gender Transposition in Childhood, Adolescence and Maturity*. NJ, Irvington, 1986
4. La Freniere P, Strayer FF, Gauthier R: The emergence of same-sex affiliative preferences among preschool peers: a developmental/ethological perspective. *Child Dev* 55:1958-1965, 1984
5. Block JH: Differential premises arising from differential socialization of the sexes: some conjectures. *Child Dev* 54:1335-1354, 1983
6. Condry J, Condry S: Sex differences: a study of the eyes of the beholder. *Child Dev* 47:812-819, 1976
7. Digman JM: Five robust trait dimensions: development, stability, and utility. *J Pers* 57:195-214, 1989
8. John OP, Angleitner A, Ostendorf F: The lexical approach to personality: A historical review of trait taxonomic research. *Eur J Pers* 2:171-203, 1988
9. McCrae RR, Costa PT: Validation of the five-factor model of personality across instruments and observers. *J Pers Soc Psychol* 52:81-90, 1987
10. Piedmont RL, McCrae RR, Costa PT: Adjective checklist scales and the five-factor model. *J Pers Soc Psychol* 60:630-637, 1991
11. Piedmont RL, McCrae RR, Costa PT: An assessment of the EPPS from the perspective of the five-factor model. *Psychol Assess: J Consult Clin Psychol*, in press
12. Costa PT, McCrae RR: From catalogue to classification: Murray's needs and the five-factor model. *J Pers Soc Psychol* 55:258-265, 1988
13. McCrae RR, Costa PT: Reinterpreting the Myers-Briggs Type Indicator from the perspective of the five-factor model of personality. *J Pers* 57:17-40, 1989
14. McCrae RR, Costa PT: The structure of interpersonal traits: Wiggin's circumplex and the five-factor model. *J Pers Soc Psychol* 56:586-595, 1989

15. Costa PT, McCrae RR: Personality disorders and the five-factor model of personality. *J Pers Disorders* 4:362-371, 1990
16. Wiggins JS, Pincus AL: Conceptions of personality disorders and dimensions of personality. *Psychol Assess: J Consult Clin Psychol* 1:305-316, 1989
17. Costa PT, McCrae RR: *The NEO Personality Inventory Manual*. Odessa, FL, Psychological Assessment Resources, 1985
18. Costa PT, McCrae RR: *NEO-PI/FFI Manual Supplement*. Odessa, FL, Psychological Assessment Resources, 1989
19. Eysenck HJ: Personality and sexual adjustment. *Br J Psychiatr* 118:593-608, 1971
20. Eysenck HJ: Personality and sexual behavior. *J Psychosom Res* 16:141-152, 1972
21. Howarth E: What does Eysenck's Psychoticism scale really measure? *Br J Psychol* 77:223-227, 1986
22. McCrae RR, Costa PT: Comparison of EPS and psychoticism scales with measures of the five-factor model of personality. *Pers Individ Diff* 6:587-597, 1985
23. Eysenck HJ: Hysterical personality and sexual adjustment, attitudes and behaviour. *J Sex Res* 7:274-281, 1971
24. Rosenheim E, Neumann M: Personality characteristics of sexually dysfunctioning males and their wives. *J Sex Res* 17:124-138, 1981
25. Kupfer DJ, Rosenbaum JF, Detre TP: Personality style and sexual functioning among psychiatric outpatients. *J Sex Res* 13:257-266, 1977
26. Schenk J, Pfrang H: Extraversion, neuroticism, and sexual behavior: interrelationships in a sample of young men. *Arch Sex Behav* 15:449-455, 1986
27. Wiggins JS, Broughton R: The Interpersonal Circle: A structural model for the integration of personality research. In Hogan R, Jones WH(eds): *Perspectives in Personality*. Greenwich, CT, JAI Press, 1985: 1-47. vol 1
28. Heilbrun AB: *Human Sex-Role Behavior*. Elmford, NY, Pergamon Press, 1981
29. Farley FH, Nelson JG, Knight WG, et al: Sex, politics and personality: A multidimensional study of college students. *Arch Sex Behav* 6:105-119, 1977
30. Joe VC, Smith JS: Conservatism and inadequate sex information. *Psychol Rep* 42:402, 1978
31. Derogatis LR, Meyer JK: A psychological profile of the sexual dysfunctions. *Arch Sex Behav* 8:201-223, 1979
32. Andersen BL, Broffitt B: Is there a reliable and valid self-report measure of sexual behavior? *Arch Sex Behav* 17:509-525, 1988
33. Derogatis LR, Meyer JK, Vazquez N: A psychological profile of the transsexual: I. the male. *J Nerv Ment Dis* 166:234-254, 1978
34. Newman AS, Bertelson AD: Sexual dysfunction in diabetic women. *J Behav Med* 9:261-270, 1986
35. Segraves RT, Schoenberg HW, Zarins CK, et al: Discrimination of organic versus psychological impotence with the DSFI: a failure to replicate. *J Sex Marital Ther* 7:230-238, 1981
36. Fagan PJ, Wise TN, Derogatis LR, et al: Distressed transvestites: psychometric characteristics. *The Journal of Nervous and Mental Disease* 176:626-632, 1988
37. Howell JR, Reynolds CF, Thase ME, et al: Assessment of sexual function, interest and activity in depressed men. *J Affective Disord* 13:61-66, 1987
38. Schreiner-Engel P, Schiavi RC, Vietorisz D, et al: Diabetes and female sexuality: a comparative study of women in relationships. *J Sex Marital Ther* 11:165-175, 1985
39. Dupkin CN: Demography of a sample clinic population. In Meyer JK, Schmidt CW, Wise TN(eds): *Clinical Management of Sexual Disorders*. Baltimore, Williams and Wilkins, 1983: 30-34

40. Costa PT, McCrae RR: Personality in adulthood: a six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *J Pers Soc Psychol* 54:853-863, 1988
41. Hogan RT: Review of The NEO Personality Inventory. In Conoley JC, Kramer JJ(eds): *The Tenth Mental Measurements Yearbook*. Lincoln, NE, Buros Institute on Mental Measurements, 1989: 546-547
42. Leong FTL, Dollinger SJ: NEO Personality Inventory. In Keyser DJ, Sweetland RC(eds): *Test Critiques*. Austin, TX, PRO-ED, 1990: 527-539. vol 8

