

Motivations for Sexual Intimacy: Development of a Needs-Based Sexual Intimacy Scale

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ABSTRACT. To assess motivations associated with sexual intimacy, a need for sexual intimacy scale (NSIS) was developed within a needs-based framework, focusing on needs for sex, affiliation, and dominance. Participants were 347 individuals associated with two large Southern California universities. Both exploratory and confirmatory factor analyses (EFA and CFA) were utilized, as were multiple attitudinal and behavioral measures for validation purposes. EFA found 22 items to be associated with the three need sets, with good internal consistency reliability. CFA confirmed these findings, and promising construct and criterion validities were also noted for the factors. Those reporting a greater need for sex noted more lifetime sex partners and one-night stands, but were less likely to use condoms. Individuals with affiliation needs were more likely to be truthful with their partners and more likely to practice safe-sex. Those reporting dominance needs want to control their partners sexually, but were less likely to use condoms. Men were found to exhibit greater needs for sex, while women reported higher levels of affiliation need. Sexual health and primary prevention concerns are discussed.

KEYWORDS. Sexuality, needs, motivation, personality, factor analysis

The purpose of this study is to develop a need for sexual intimacy scale (NSIS). To date, little research has focused on sexual intimacy. Instead, investigations have focused on sexual desires, sexual motivations, and drive for sexual intercourse, while overlooking needs for closeness/affiliation and interpersonal power. For example, Hoffman and Bolton (1997) noted that sexual desire is associated with five components (love, compliance, pleasure, potency, and altered states). Simpson and Gangestad (1991) coined the term "sociosexuality" to describe the practices/desires associated with casual sex, with motivations associated with desires for novel sex, lack of becoming psychologically close

to partners, and desires to attract/retain partners. Christopher and Cate (1985) note decisions made prior to first sexual intercourse are driven by levels of general physical arousal, obligations/pressures, positive affect, and circumstances surrounding the situation (e.g., alcohol use, advanced plans for intercourse, being on a romantic date, etc.). Carroll, Volk, and Hyde (1985) showed that males' motivations for sexual intercourse are coupled with fun, pleasure, and physical enjoyment, while women's motivations were linked to commitment, emotion, and love. Hill and Preston (1996) applied various motivational frameworks to investigate sexual motivation, noting eight components, including

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feeling valued by a partner, value for a partner, relief from stress, providing nurturance, enhancing own power, power of partner, pleasure, and procreation.

We view need for sexual intimacy as a broader concept than simple sexual desire or desire for sexual intercourse. Our conceptualization of sexual intimacy stems directly from Murray's work on needs (Murray, 1938). In particular, three needs were chosen—sex, affiliation, and dominance—to represent need for sexual intimacy. These were chosen due to their definitional properties and associations with sexuality. According to Murray (1938, p. 167), the need for *sex* refers to the “format[ion] and further[ing] of an erotic relationship. To have sexual intercourse.” *Affiliation* refers to the desire “to draw near and enjoyably co-operate or reciprocate with an allied [other] . . . To please and win affection of a cathected [other]” (p. 174). *Dominance* is the need “to control one's human environment. To influence or direct the behaviour of [others] by suggestion, seduction, persuasion, or command” (p. 152).

All of these components have been shown to be associated with interpersonal intimacy and sexually-related attitudes and behaviors. For example, Moss and Schwebel (1993) include these three elements in their conceptualization of intimacy. Maslow's (1966) hierarchy of needs includes love/belonging and sex, with both fulfilled through intimate relationships. Sternberg's work on love (1986) shows an interdependency between intimacy and feelings of connectedness and closeness, and McAdams and Powers (1981) also note an association between needs for intimacy and affiliation. Meston and Buss (2007) show that needs for intimacy, closeness, and sexual desires are associated with reasons why individuals pursue sex. In addition, their study shows that power over a sexual partner plays a role in seeking intimacy and sex. Schultheiss, Dargel, and Rohde (2003) also note that individuals' sexual intercourse behavior is associated with motivations for power, and Yost and Zurbriggen (2006) found that an unrestricted sociosexual orientation in women was associated with greater desires for partner dominance. Falbo and Peplau (1980) found a prevalence of power strategies in intimate relationships, while

Stets (1993) showed that partner control (e.g., “I make him/her do what I want”; “I impose my will onto him/her”) is especially elicited in dating relationships during conflict.

Regarding sexual health implications, there is a requisite need for assessing sexual intimacy given its apparent association with risk of sexually transmitted diseases (STDs); increased drives for sexual intimacy may lead to risky sexual pursuits and STD exposure. For example, risky sexual practices have been shown to be associated with increased desires for intimacy and power (Monahan, Miller, & Rothspan, 1997). Given the continued prevalence of STDs and sexual activity in the general population (Centers for Disease Control and Prevention, 2005; Mosher, Chandra, & Jones, 2005), and among adolescents and young adults (Apostolopoulos, Sönmez, & Yu, 2002; Campbell, Peplau, & DeBro, 1992; Centers for Disease Control and Prevention, 2002; Maticka-Tyndale, Herold, & Mewhinney, 1998; Paul, McManus, & Hayes, 2000; Reinisch, Sanders, Hill, & Ziemba-Davis, 1992; Weinstock, Berman, & Cates, 2004), a measure to assess the elements of sexual intimacy is needed. Further, assessment of individuals' drives for sexual intimacy would help aid in the planning of primary prevention strategies used in public health (see Kaplan, 2000) to limit risky sexual behaviors and increase safe-sex practices.

Having a scale to assess need for sexual intimacy would also complement the current available measures related to desire and motivation. For example, Simpson and Gangestad (1991) created the seven-item SOI measure to assess sociosexuality, which focuses on casual sexual acts, sexual partner counts, sexual frequency, fantasy, and various opinions regarding sex and sexuality. Sexual desire (e.g., Beck, Bozman, & Qualtrough, 1991; see also Mehrabian & Stanton-Mohr, 1985) is typically measured through items addressing sexual arousability (emotional and physical), fantasy, sexual stamina, and sex drive. Snell and colleagues (Snell, Fisher, & Miller, 1991; Snell, Fisher, & Walters, 1993) have developed scales measuring sexual awareness and sexuality. Hill and Preston's AMORE scale (1996) utilizes 62 items to assess eight components of sexual

motivation. Conceptually, our proposed NSIS measure intends to measure desires for sexuality, and will also include elements addressing affiliation and dominance. Similarly, the proposed measure will address facets which are evident in the measurement of sexual motivation, but purposely forgoes motivations such as stress relief or procreation in favor of a measure which is more intimacy focused.

For the current study, a pool of 23 items was generated to measure the needs for sex, affiliation, and dominance. Exploratory and confirmatory factor analysis were used to assess and confirm the hypothesized need sets (sex, affiliation, and dominance). Construct and criterion validity were also evaluated.

METHOD

Participants

Study participants were 347 students with affiliation to two large Southern California universities. The mean age of the sample was 21.1 years ($SD = 5.1$), primarily female (61.4%; 37.8% male; 0.8% missing), single (91.6%; 5.2% married, 1.7% divorced, 1.5% missing), and white (40.6%; 26.2% Asian; 20.5% Latino; 2.9% African-American; 8.4% other/mixed; 1.4% missing). Of the 347 participants, 274 cases (79%) reported at least one sexual intercourse experience. No differences using discriminant function analysis were found between those reporting sexual intercourse and those reporting no experience across the need for sexual intimacy items ($Wilk's \Lambda = .91$, $\chi^2 = 32.54$, $df = 23$, $p = .08$). A two-group confirmatory factor analysis also found the factor-to-item parameter estimates to be equal across the groups (results available upon request).

Measures

Need for sexual intimacy

A pool of 23 items was created to address sexual intimacy needs (see Table 1) written specifically for the study. The items were constructed on a five-point scale ranging from 1 (*disagree definitely*) to 5 (*agree definitely*).

All items utilized the preface "I need" followed by sexual intimacy needs statements. Scale instructions read, "The next few items address things we may 'need' in life. Some say we 'need' many things in order to survive (e.g., food, shelter, etc.). Below we have presented a series of items and would like you to rate each item as to how much you agree or disagree with them as things you may 'need.' The term 'Partner' below refers to a sexual partner (e.g., dating partner, boyfriend/girlfriend, long-term partner/spouse)."

Validity items

Nineteen attitudinal/behavioral items were used for construct validity addressing the areas of sexual behaviors, sexual communication, and relationship attitudes/opinions. Most were written specifically for the current study (see Results section for item wordings, scale anchors, and instructions).

Demographic items

Four items were included to assess gender, age, marital status, and ethnicity.

Procedure

Data were collected using *SurveyWiz* (Birnbaum, 2000), an Internet survey design program. Participants were notified of the survey through flyers posted in the university psychology departments, or through psychology course announcements. The announcements directed participants to the URL of a university homepage for the study hyperlink. Data were collected at three two-week intervals during a one-year period. Informed consent was noted at the beginning of the survey, and research credit for participants was provided after the assessment was completed. Although sexual needs and various beliefs and attitudes toward sex were collected, participants were informed that the survey assessed health-related motivations (see Marelich & Clark, 2004).

Analyses

Exploratory and confirmatory factor analysis (EFA and CFA) were undertaken. For EFA,

TABLE 1. Exploratory and confirmatory factor analysis: rotated PAF pattern matrix loadings, CFA parameter estimates, subscale means and standard deviations, and internal consistency reliabilities (N = 347)

Items	EFA Pattern Matrix			CFA
	Sex	Affiliation	Dominance	Parameter Estimates ^{1,2}
<i>Need for Sex</i>				
(1) To have more sex	0.85	0.02	-0.02	0.80
(2) Sex every day	0.75	-0.02	0.09	0.81
(3) To have an orgasm every day	0.70	-0.02	0.15	0.79
(4) To let myself go sexually with someone	0.69	0.16	0.23	0.52
(5) Sex every couple of days	0.69	0.08	0.06	0.71
(6) Someone who is "great in bed"	0.65	0.10	0.09	0.73
(7) Sex with a lot of partners	0.51	-0.28	0.00	0.46
(8) To take control of my partner when we are intimate	0.51	-0.02	0.23	0.61
<i>Need for Affiliation</i>				
(1) A partner who loves me	-0.01	0.76	0.04	0.76
(2) Somebody to love	0.01	0.74	0.05	0.75
(3) Companionship	0.16	0.74	-0.07	0.77
(4) A companion in life	0.02	0.74	0.09	0.77
(5) Complete trust in the people I am intimate with	-0.05	0.61	0.12	0.61
(6) Nobody special in my life (reverse coded)	-0.09	0.49	-0.07	0.43
(7) Somebody to hold my hand	-0.04	0.49	0.24	0.49
(8) A few really good friends	0.09	0.43	-0.14	0.44
(9) Someone to sleep next to me	0.27	0.40	0.27	0.38 ³
<i>Need for Dominance</i>				
(1) My partner to tell me where they are at all times	-0.08	0.21	0.64	0.27
(2) Control over my partner	0.18	0.15	0.63	0.61
(3) My partner to give me what I want (such as financial support, clothes, a car)	0.08	0.15	0.50	0.46
(4) A partner I can manipulate	0.24	-0.24	0.43	0.64
(5) The ability to order my partner to have sex with me if I want to	0.43	-0.21	0.42	0.84
Mean (SD)	2.56 (0.91)	4.37 (0.56)	2.25 (0.77)	
Internal Consistency Reliability	0.88	0.82	0.74	

Note: Loadings based on the 22 item solution. The item "Plenty of friends" was initially included in the EFA, but was removed due to poor loadings and a low communality. Subscales were generated by summing the number of items within each factor, then dividing by the number of items to get the mean average. In application, items should be mixed across subscales to avoid response bias.

¹CFA Model 2 (modified model) with one cross-loading and nine within factor error covariations: Need for Sex (Item 1 with 3; 2 with 5,6); Need for Affiliation (Item 1 with 3, 5, 6; 7 with 9); Need for Dominance (Item 1 with 2, 3).

²CFA results forced a 3-factor solution with items allowed to load only on the factor suggested by EFA (unless otherwise noted).

³Item also crossloads .38 on *Need for Sex*.

principal axis factoring was used. CFA was performed using EQS (Bentler, 2006) to confirm the resulting EFA structure. Construct and criterion validity of the resulting subscales were evaluated through correlational analyses.

RESULTS

Exploratory Factor Analysis

Prior to analysis, data were evaluated and met typical factor analysis assumptions (e.g.,

sampling adequacy, absence of singularity and extreme multicollinearity, factorability of *R*). The number of derived factors was determined using parallel analysis, inspection of the eigenvalue scree plot, and interpretability of the resulting factor solution (Gorsuch, 1983; Thompson & Daniel, 1996). Parallel analysis suggested a three-factor solution, as did inspection of the scree plot.

Principal axis factoring (PAF) was performed on the 23 items requesting a three-factor solution. The total variance accounted for by

the three factors was 44.21%. Both orthogonal and oblique rotations (using the Direct Oblimin method and the default delta value of 0) were evaluated, and the oblique rotation was retained because it yielded a more interpretable solution. All 23 items had adequate pattern matrix loadings (.33 or higher) on at least one of the factors except the item [*Need*] *plenty of friends*, and the extracted communality of this item was also low (.10). After removal of this item, the analysis was rerun on the remaining 22 items (see Table 1 for final loadings). Total variance accounted for was 45.78%, and the three factors reflected the proposed need subscales of sex (factor one), affiliation (factor two), and dominance (factor three).

Correlations across the factors showed that need for sex and need for dominance were moderately associated ($r = .39$), while the other cross-factor correlations were less than $r = .10$. All items clearly loaded on a single factor except one; the item [*Need*] *the ability to order my partner to have sex with me if I want to* had loadings of .43 on need for sex, and .42 on need for dominance. Since this item was originally written to assess dominance, it was assigned to that factor. Internal consistency reliabilities for the sample ranged from .74 to .88 (see Table 1).

Confirmatory and Second-Order Factor Analysis

Confirmatory factor analysis was performed on the 22 items to verify the factor structure (Van Prooijen & Van Der Kloot, 2001; also see Gerbing & Hamilton, 1996, for advantages of using CFA on EFA data results). Factor variances were set at 1.0, while factor loadings, measurement error, and factor correlations were allowed to vary and provided start values of .5. Items were assigned directly to their respective factors and were not allowed to load on the remaining factors. Multiple fit indices were evaluated, including the root mean squared error of the approximation (RMSEA), the comparative fit index (CFI), and the goodness of fit index (GFI).

The resulting model (Model 1) showed ill fit with the data (see Table 2 for fit index results). Model modifications were next explored to improve fit, and only those modifications that could be justified were adopted (MacCallum, 1986).

TABLE 2. Confirmatory factor analysis model chi-square tests, degrees of freedom, and fit indices (N = 347)

	Model χ^2	df	RMSEA	CFI	GFI
Model 1	716.01	206	0.085	0.84	0.84
Model 2 (Modified model)	441.71	196	0.061	0.92	0.90
Model 3 (with second-order factor)	456.02	197	0.062	0.92	0.89

The item [*Need*] *someone to sleep next to me* was allowed to cross-load on both Need for Affiliation and Need for Sex based on item content and EFA pattern matrix loadings. Additional modifications included freeing nine within-factor error variances (no start values were stipulated; see Table 1, footnote 1, for error covariations applied). Arguments have been made (Byrne & Baron, 1993; also see Tanaka & Huba, 1984) that such error covariations for scales are sample-specific and reflect error in the parameters not accounted for by the underlying constructs. The modified model (Model 2; see Table 2) showed good fit. In addition, all factor loadings were significant at .0001 or better, and two significant factor correlations were noted (Need for Sex with Need for Affiliation, $r = .11$, $p < .05$; Need for Sex with Need for Dominance, $r = .71$, $p < .0001$; note that these factor correlations are highly suggestive of the presence of a second-order factor, which is explored below). To assess the triviality of these added error covariations, a sensitivity analysis was performed (Byrne & Baron, 1993); the parameter estimates from Model 2 highly correlated with those from Model 1 ($r = .98$) suggesting the modifications did not overtly alter the parameter estimates.

Given the correlated factors, a second-order factor analysis was next performed. A latent construct of *Need for Sexual Intimacy* was added to the model as the second-order factor (Model 3), and paths from this construct to the existing factors were estimated (start values of .5 were provided). The variance for the second-order factor was set a 1.0. Disturbance terms for the original factors were estimated, as were paths from the

second-order factor to the original factors. The disturbance terms for Need for Sex and Need for Dominance were constrained for identification purposes (Byrne, 1994). All other parameter estimates remained the same as Model 2 with the following exceptions: (a) correlations between the factors had to be dropped per the second-order factor; and (b) one path from each of the original factors to an item were required to be fixed at 1.0 for identification purposes. The final model (Model 3) showed good fit (see Table 2) with all factor loadings significant at .0001 or better. All paths from the second-order factor to the first-order factors were positive, with two significant at .0001 or better (Need for Sex and Need for Dominance; the probability for the Need for Affiliation path was .15).

Construct and Criterion Validity

The need for sexual intimacy subscales may be validated through their associations with various attitudinal/behavioral measures, including items on sexuality attitudes/behaviors, and relationship needs/dependence.

As noted in Table 3 through correlations, those with a higher *Need for Sex* showed significant associations ($p < .05$) with items related to sexual behaviors (e.g., more lifetime sexual partners, more one-night stands, more likely to sexually dominate their partners, less condom use, greater use of intoxicants during sexual encounters, agreeing that it is not very likely they will date a new intimate partner in the future, when intimate they are more likely to close their eyes and let themselves go, and to be consumed with thinking about their partners). For items addressing sexual communication, those higher in Need for Sex find it hard to talk about safe sex with their partners, disagree that if their partners do not want to use a condom there is little they can do, and report a higher likelihood to tell partners they are HIV negative to have sex even though they have not been tested in over a year. In addition, they also report that sex is the most important aspect of a relationship, and believe they cannot be happy in a relationship without sex. For the overall sample, men reported a higher Need for Sex than women.

Those higher in *Need for Affiliation* show associations related to sexual behaviors (e.g., disagreeing that in the future they will not date their new intimate partner, more likely to close their eyes and let themselves go, and more likely to be consumed with thinking about their partners). Regarding sexual communication, those higher in Need for Affiliation were less likely to say they had fewer sexual partners than they really had, and were less likely to mislead their partners about a negative HIV test. No associations were noted with condom use or discussions of safe sex. Those higher in affiliation also noted they needed to be in a relationship, yet sex was not the most important aspect of the relationship. Overall, women reported a higher Need for Affiliation than men.

Regarding those high in *Need for Dominance*, associations were noted for sexual behaviors (e.g., less likely to use a condom, less likely to have been turned down for sex because no condom was available, preference for dominating their partners sexually, agreeing that it is not very likely they will date a new intimate partner in the future, more likely to close their eyes and let themselves go, and more likely to be consumed with thinking about their partners). For sexual communication, those higher in Need for Dominance were less likely to agree that if their partners do not want to use a condom there is little they can do about it, and more likely that they ask their partners about past sexual experiences. They also report the need to be in a relationship, and that sex is an important aspect of the relationship.

DISCUSSION

Overall, sexual intimacy as measured through the NSIS was found to be a viable construct utilizing needs for sex, affiliation, and dominance. The resulting subscales showed good reliability and preliminary validity with various target attitudes and behaviors. In addition, the scale appears to tap multiple dimensions not assessed via measures of sexual desire or intercourse, and is more focused on intimacy-related issues compared to broader measures of sexual motivations. The three dimensions are anchored upon a single

TABLE 3. Correlations between sexual intimacy subscales using attitudinal, relational, and behavioral items in addition to select demographics

Variables	<i>n</i>	Sex <i>r</i>	Affiliation <i>r</i>	Dominance <i>r</i>
<i>Sexual Communication and Behaviors</i>				
What is the total number of sexual partners you have been with during your lifetime? ^a (Categories: 0, 1 to 3, 4 to 10, 11 to 16, 17 or more)	346	0.23***	-0.01	0.00
Have you ever had a one night stand? (0 = No, 1 = Yes) ^b	346	0.25***	-0.05	-0.07
Said you had fewer sexual partners than you really had? ⁺ (0 = No, 1 = Yes) ^b	343	0.07	-0.15**	-0.04
How often do you use a condom when intimate with your partner(s)? (1 = Rarely/Never, 2 = Less than half the time, 3 = Half the time, 4 = More than half the time, 5 = Always) ^b	273 ^c	-0.12*	-0.02	-0.18**
Within the past 5 years, has another person ever declined to have sexual intercourse with you because there was no condom available at the time? (0 = No, 1 = Yes) ^b	270 ^c	-0.06	-0.11	-0.14*
How often does the use of intoxicants (e.g., alcohol, drugs) occur during your sexual encounters? (1 = Rarely/Never, 2 = Less than half the time, 3 = Half the time, 4 = More than half the time, 5 = Always) ^b	274 ^c	0.19**	-0.08	0.00
With a casual sexual partner, how likely do you feel that unprotected sex could lead to HIV? (1 = Not very likely, 2 = Somewhat likely, 3 = Moderately likely, 4 = Highly likely) ^b	269 ^c	-0.14*	-0.03	0.03
Told a partner you were HIV negative to have sex although you had not been tested in over a year? ⁺ (0 = No, 1 = Yes) ^b	273 ^c	0.12*	-0.12*	0.05
I find it hard to talk about safer sex issues with my lover. ^d (1 = Disagree strongly, 5 = Agree strongly)	272 ^c	0.12*	-0.02	0.05
If my sex partner does not want to use a condom there is little I can do about it. ^d (1 = Disagree strongly, 5 = Agree strongly)	272 ^c	0.20**	-0.10	0.29***
<i>When I'm about to make love, have sex, or be intimate with a new partner, . . .</i> ⁺⁺ (All on the scale: 1 = Disagree definitely, 5 = Agree definitely)				
I like to dominate my partner sexually.	339	0.44***	-0.06	0.36***
I know that it's "not very likely" that I will date this person in the future.	339	0.17**	-0.25***	0.12*
I ask my partner about their past sexual experiences.	339	0.02	0.15**	0.11*
I close my eyes and 'let myself go'.	336	0.30***	0.10*	0.16**
All I can think about is touching him/her.	336	0.39***	0.15**	0.25***
<i>Attitudes/Opinions Toward Relationships</i> ⁺⁺ (All on the scale: 1 = Disagree definitely, 5 = Agree definitely)				
I feel like I always need to be in a relationship.	246 ^e	0.22**	0.23***	0.35***
I prefer being alone rather than being in a relationship.	246 ^e	-0.02	-0.37***	-0.16*
Sex is most important aspect of a relationship.	245 ^e	0.45***	-0.13*	0.28***
I don't need to have sex in order to be happy in a relationship.	246 ^e	-0.37***	0.02	-0.12
<i>Demographics</i>				
Gender (0 = Male, 1 = Female)	344	-0.38***	0.21***	-0.08
Age	345	0.08	-0.01	-0.03

* $p \leq .05$; ** $p < .01$; *** $p < .001$ ^aSpearman Rho (Sex = 0.23***, Affiliation = -0.01, Dominance = 0.01)^bReverse coded: Coding rubric under item is reversed for ease of interpretation^cSexually active only^dItems from Chou, Chin, and Rodriguez (1998)^eItems included in only two of the three questionnaire administrations⁺Directions for this item: Below are a number of items addressing things you may or may not have done sometime in your life. Please answer each item YES or NO. "Sex" below can refer to intercourse or other forms of sexual intimacy (e.g., oral sex, manual stimulation).⁺⁺Directions for these items: For the next set of items, simply rate how much you agree or disagree with each statement.

personality theory, thereby avoiding criticisms often layered upon transtheoretical scales (Slife & Williams, 1995).

These subscales may be useful for researchers involved in health education and intervention programs addressing sexual health. Although one may extrapolate such drives through overt behaviors (e.g., having multiple sexual partners is suggestive of need for sexual intimacy), being able to assess these needs prior to behavioral expression sets a course for possible intervention. For example, those showing a higher need for sex reported less condom use and the ability to discuss condoms with their partners, but reported greater sexual activity, the use of intoxicants during sex, and were more likely to lie about having an HIV-negative test although they had never been tested. These individuals could be targeted for preventative health interventions based on reported needs.

Other applications pertain to (a) those who study close and intimate relationships, and (b) general theory inquiry. Personality traits, as assessed through the five-factor model or "Big Five" (Digman, 1990), have been shown to directly effect social relationships (Asendorpf & Wilpers, 1998). Although select needs or need combinations have been applied to social relationships (e.g., achievement, affiliation, intimacy, and power; McAdams, 1988; McClelland, 1985; McClelland, Atkinson, Clark, & Lowell, 1953; Winter, 1973), the remainder appear underutilized except in clinical evaluations. Regarding theory inquiry, Murray's personality theory has over the decades generated a host of applications (Hall, Lindzey, & Campbell, 1998), including a broad range of projective and objective assessments (Edwards, 1959; Edwards, Abbott, & Klockars, 1972; Jackson, 1984; McClelland, 1980), and remains a popular topic in personality textbooks. However, there is further room for construct development through applying needs in different combinations, settings, and situations, subsequently noting how these needs influence behavior.

As noted earlier, the three proposed needs were shown to be associated with various items concerning sexual behaviors, sexual communication, and relationship attitudes/opinions, and

were found to be in the directions expected per research using similar measures (e.g., sexual desire, sociosexuality, and sexual motivations). Indeed, those with higher needs for sex and dominance reported more sexual partners and one-night stands, plus report greater desires and importance of sex. Those with greater affiliation were more truthful regarding numbers of sexual partners, and had a preference for being in a relationship. In addition, the noted gender differences also agree with past research; women were more likely to be associated with needs for affiliation, while men were more likely to be associated with needs for sex (Jones, 1998; Schmitt, 2005; Traeen & Kvaem, 1996). Although not reported in the results due to space limitations, we did compare factor loadings across gender using a two-group CFA and found that men and women differed significantly ($p < .01$) on one item from each of the three subscales. Men showed higher factor loadings than women for the items *[Need] sex with a lot of partners*, *[Need] somebody to love*, and *[Need] the ability to order my partner to have sex with me if I want to*. Even though loadings for women on these items were lower, they remained significant at the .01 or better level (thus making their assignment to the respective factors tenable).

Although this study shows encouraging results regarding the psychometric properties of the NSIS, there are several caveats. First, a primarily younger sample was retained, and because of this it is possible that study results may not generalize well to other populations. For example, the results may not necessarily apply to older populations. Given that younger individuals have been shown to have a higher sex drive than those in mid or later life, future research should assess these scales with older populations. Second, only limited validation of the scale was undertaken. Additional validation with a larger range of behaviors should be made (e.g., with sociosexuality). Third, regarding the second-order factor analysis, the resulting path from the Need for Sexual Intimacy second-order factor to Need for Affiliation could be stronger. Additional psychometric investigations should be completed to evaluate how best to strengthen this link.

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