#### ORIGINAL PAPER



# Sexual Desire in Sexual Minority and Majority Women and Men: The Multifaceted Sexual Desire Questionnaire

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**Abstract** Sexual desire is increasingly understood to be multifaceted and not solely erotically oriented, but measures are still generally unitary and eroticism-focused. Our goals in this article were to explore the multifaceted nature of sexual desire and develop a measure to do so, and to determine how multifaceted sexual desire might be related to gender/sex and sexual orientation/identity. In the development phase, we generated items to form the 65-item Sexual Desire Questionnaire (DESQ). Next, the DESQ was administered to 609 women, 705 men, and 39 non-binary identified participants. Results showed that the DESQ demonstrated high reliability and validity, and that sexual desire was neither unitary nor entirely erotic, but instead was remarkably multifaceted. We also found that multifaceted sexual desire was in part related to social location variables such as gender/sex and sexual orientation/identity. We propose the DESQ as a measure of multifaceted sexual desire that can be used to compare factor themes, total scores, and scores across individual items in diverse groups that take social context into account. Results are discussed in light of how social location variables should be considered when making generalizations about sexual desire, and how conceptualizations of desire as multifaceted may provide important insights.

**Keywords** Desire · Sexuality · Relationships

#### Introduction

#### What Is Sexual Desire? Definitional Limitations

Sexual desire has been empirically distinguished from sexual arousal as a state involving some but not all components of the latter (Bancroft, 2010) though some researchers now see the two as overlapping (Bancroft & Graham, 2011; Laan & Both, 2008). Little phenomenological consensus exists regarding what sexual desire actually is despite widespread and increasing research on it, and much remains to be understood of its complex nature (Bancroft, 2010).

Though a universal definition of sexual desire has yet to be established, empirical measures often implicitly assume sexual desire to be purely erotic, defined by the desire to engage in sexual activity for pleasure/genital stimulation. For example, the Sexual Desire Inventory (SDI) defines sexual desire as a desire to initiate sexual behavior (i.e., touching each other's genitals, giving or receiving oral stimulation, intercourse) (Spector, Carey, & Steinberg, 1996). Another common measure of sexual desire and, more broadly, sexual function, is the Female Sexual Function Index (FSFI; [Rosen et al., 2000]), which defines sexual desire as "a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex" (Rosen et al., 2000). The Cues Resulting in Desire for Sexual Activity Scale (CSDS) for women likewise defines the goal of desire as sexual activity only (McCall & Meston, 2006). Similarly, in other studies, sexual desire has been defined as a wish to engage in sexual experience (Schreiner-Engel, Schiavi, White, & Ghizzani, 1989), an interest in sexual expression (Woods, Mitchell, & Julio, 2010), or the frequency with which one has sexual thoughts (Bancroft & Graham, 2011). Though



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each of these versions of sexual desire has subtle differences, all are similar in that they are unitary in definition: focusing only on an explicitly or implicitly erotic component of desire. The often-assumed unitary nature of the concept is problematic because not all people may experience desire as a purely erotic; rather, it may be a multifaceted phenomenon (van Anders, 2012b).

# Just How Erotic Is Sexual Desire? The Multifaceted Nature of Desire

Recent work has established that sexual desire often extends beyond the erotic and is actually multifaceted in nature (Goldhammer & McCabe, 2011; Mark, Fortenberry, Herbenick, Sanders, & Reece, 2014; van Anders, 2012b, 2013), encompassing aspects like nurturance, power, and conflict management. For example, the Steroid/Peptide Theory of Social Bonds (S/P Theory) (van Anders, Goldey, & Kuo, 2011) proposes that dyadic sexuality may fall into one of two categories based on empirical findings with testosterone, each of which has multiple potential components of desire: (1) erotic, characterized by genital pleasure, reproduction, power, etc.; (2) nurturant, characterized by warm, loving contact. Thus, theory suggests that sexual desire includes more complex and sometimes overlapping facets.

The complexities of desire beyond the erotic are evidenced through studies exploring the influence of social pressures on sexual behavior, many of which reveal non-pleasure-based goals for engagement in sexual activity (Regan & Berscheid, 1996). For example, research has shown that people may be less likely to fulfill their own sexual urges in favor of sexual activity that is consistent with their partner's desires (Edelstein, Chopik, & Kean, 2011; Hipp, Kane Low, & van Anders, 2012), and that others engage in sexual activity not to orgasm themselves, but to please their partner and increase feelings of Intimacy (Beck, Bozman, & Qualtrough, 1991; Brotto, 2010; Brotto, Heiman, & Tolman, 2009; Laan & Both, 2008; Meana, 2010). Furthermore, when listing reasons for engaging in sexual activity, many women and men report non-erotic motivations such as love, Intimacy, relationship growth, pleasing one's partner, feeling sexually desirable, and emotional closeness (Mark et al., 2014; Meana, 2010; Meston & Buss, 2007), suggesting that sexual desire often closely aligns with nurturance in addition to eroticism. Additionally, women have indicated a variety of physical, cognitive, emotional, and interpersonal descriptions of sexual desire (Goldhammer & McCabe, 2011), emphasizing a multifaceted nature that extends beyond engagement in sexual activity for purely erotic reasons.

Given the above evidence, it is apparent that sexual desire can manifest itself in multiple ways beyond the simple desire to initiate sex or experience orgasm/genital pleasure, and that it often includes facets of nurturance and/or power. To be clear, we are not suggesting that sexual desire is essentially or inherently non-erotic. Instead, evidence does not seem to support conceptualizing sexual desire as only erotic, and does show that sexual desire occurs within social contexts, some of which may sometimes involve sexual desires that are not erotically focused.

#### Multifaceted Desire and Social Location

Above, we provide evidence that sexual desire is multifaceted in form, but there is also reason to expect that it may differ by social location. Constructs such as gender/sex and sexual orientation/identity may play a role in experiences of sexual desire, and the construction of multifaceted desire may vary between samples based on these social location variables.

In particular, research shows that gender/sex differences exist in unitary conceptions of sexual desire, which may reflect innate and/or socially constructed gender/sex differences in understandings of sexuality. For example, studies on sexual desire and gender/sex differences have often focused on the root cause of sexual desire, attributing men's desire to intrinsic factors and women's to external factors (Baumeister, 2000). Researchers have generally found men's desire to be stronger and more frequent than women's (Baumeister, Catanese, & Vohs, 2001; Peplau, 2003; Petersen & Hyde, 2011; Regan & Atkins, 2006), and men's high desire is typically attributed to a biological basis (DeLamater & Hyde, 1998). Women's sexual desire, when high, is often situated as responsive and thought to be most influenced by environmental factors such as Intimacy and romance (Regan & Berscheid, 1996). When asked what their desire was for, men scored significantly higher than women on desire for sexual release, orgasm, and desire to please their partner, while women scored significantly higher than men on desire for Intimacy, emotional closeness, love, and feeling sexually desirable (Mark et al., 2014). As a result, men are often thought to experience sexual desire as a desire for their own spontaneous pleasure, and women are thought to experience sexual desire as a desire for relationship factors (Hatfield, Sprecher, Pillemer, Greenberger, & Wexler, 1989), promoting conceptions that men's and women's sexual desires are essentially different.

Research also indicates, however, that women's and men's experiences of sexual desire are highly contextual and that both women and men may experience multiple facets of sexual desire depending on the situation. For example, studies have shown that the likelihood of women and men accepting a casual sex offer is predicted by the extent to which they believe the experience will be pleasurable for them (Conley, 2011), and that women's anticipation of negative judgment partially mediates gender/sex differences in casual sex engagement (Conley, Ziegler, & Moors, 2013). Additionally, research suggests that women's engagement in non-relationally motivated sex may be increasing as traditional norms of femininity change, reflected by an increase in casual sex and self-pleasuring (Levant, Rankin, Hall, Smalley, & Williams, 2012; Petersen & Hyde, 2011). This demonstrates that, despite traditional notions that women's sexual desire is innately romantic, women do have erotic, non-relational motivations for sex, but that they may be dependent on social variables. Furthermore, although traditional notions indicate that men's desire is purely erotic, a



study assessing women's and men's descriptions of sexual fantasies showed that there were no gender/sex differences in erotic content (e.g., physical attraction, feeling sexual) and nurturant content (e.g., physical touch in a romantic context) (Goldey, Avery, & van Anders, 2014), indicating that both women's and men's sexuality can be characterized by erotic and nurturant motivations. Interestingly, most studies examining multifaceted desire have focused solely on women, despite evidence that men's desire may be multifaceted too (Brotto, 2010; Janssen, McBride, Yarber, Hill, & Butler, 2008; Mark et al., 2014). Whether this reflects actual gender/sex differences in desire or adherence to sexual norms (Hynie, Lydon, Côté, & Wiener, 1998; Levant et al., 2012), the previous research suggests that there are gender/sex differences and overlaps in experiences of multifaceted desire and that they should be considered in thinking about generalizations of sexual desire.

As with unitary sexual desire (i.e., for erotic pleasure), multifaceted sexual desire has largely gone unstudied in association with sexual orientation/identity; most research has focused on heterosexual or unspecified populations (Goldhammer & McCabe, 2011; Mark et al., 2014; Regan & Berscheid, 1996). However, Peplau (2003) reported that lesbians are more likely to have sexual fantasies that are personal and romantic than are gay men, perhaps reflecting gender differences in relational aspects of sexuality that can extend to sexual desire as well. Other studies have reported similar findings in lesbian and gay populations (Klinkenberg & Rose, 1994; Leigh, 1989; Rose, 1996). Still, few other studies to our knowledge specifically characterize the experiences of desire in samples diverse by sexual orientation/identity or consider similarities or differences in sexual desire between groups of varying sexual orientation/identities.

Given evidence for multifaceted sexual desire and its relation to social location, measuring sexual desire beyond the erotic and as it pertains to gender/sex and sexuality could be crucial to understanding sexual desire as a basic phenomenon as well as clinical issues. Sexual desire is likely influenced by context, partnerships, and social expectations; however, a measurement tool that incorporates multiple facets of sexual desire has not yet been created. Thus, we developed a new multidimensional inventory, the Sexual Desire Questionnaire (DESQ), which can be used to assess multiple aspects of sexual desire relating to nurturance, sexuality, Power/Control, *and* eroticism, in addition to a number of other potential characterizations of desire.

#### **Present Investigation**

The purpose of this study was to develop and evaluate a self-administered questionnaire to measure multifaceted sexual desire, the DESQ. The development and assessment of the DESQ took place over three parts: (1) development of the DESQ—we generated DESQ items through literature review, research assistant brainstorming, and discussion among members of the van Anders

Laboratory. (2) Testing the DESQ—we conducted two waves of data collection: one with participants filling out the DESQ in the laboratory and another with participants filling out the DESQ online. Using a factor analysis, we assessed the structure of our hypothesized constructs within multifaceted sexual desire and evaluated its psychometric properties, confirming that sexual desire is a multifaceted phenomenon that has characterizations of eroticism alongside nurturant and other non-erotic factors. (3) DESQ and social location—we explored similarities and differences in DESQ factor loadings by gender/sex and sexual orientation/identity.

### Method

Two experimenters from the laboratory reviewed the previous literature to determine recognized motivations and characterizations of sexual desire. Each experimenter then separately created a list of items that could characterize sexual desire, with instructions to include as many items as possible in addition to those mentioned in the previous research. The experimenters then met and compared their lists, combining redundant items and eliminating items deemed irrelevant. The list was then presented at a laboratory meeting comprised of eight individuals, including research assistants, graduate students, student volunteers, the laboratory coordinator, and the senior author. Our goal was not to cover all possible components of sexual desire. Instead, our goal was to investigate the possibility of diverse and multifaceted sexual desire experiences. Meeting attendees commented on item clarity, relevance of content, and whether items should be added, deleted, or changed. Items were revised based on the feedback from this meeting to create the DESQ.

#### **Participants**

Participants (n = 1355) filled out the DESQ in two separate waves of data collection; we combined data from Wave I (n = 222) and Wave II (n = 1133) for analyses. Participants were a sample of adult women (n = 609, M age = 22.89, SD = 6.25) and men (n = 705, M age = 26.49, SD = 8.64), with 39 participants identifying as another gender (M age = 24.85, SD = 4.86), and two participants not identifying their gender. All participants were included in broad sample analyses; participants who did not identify as either woman or man were excluded from analyses by gender/sex orientation/identity because there was not a large enough sample size for separate assessment of non-binary individuals. Participants were recruited from the University of Michigan undergraduate psychology subject pool (n = 129)and the community (n = 1226) (e.g., Office of the Registrar random email sampling and online advertisements via Craigslist, Facebook, and Reddit). We also recruited specifically to increase sexual minority representation through similar advertisements



targeted toward lesbian, gay, bisexual, transgender, and queer women and men. The majority of participants were students, 64.9% (n = 879), and many were employed (n = 887). Most had graduated from high school (n = 1344), and many had at least some college experience (n = 1141). Participants self-identified their race/ethnicity/nation, which we categorized as Caucasian/ White (n = 892), multiracial (n = 89), European (n = 78), Asian/ Asian-American (n = 56), African-American/Black (n = 43), Hispanic/Latino/a (n = 25), Australian/New Zealander (n = 23), Indian (n = 30), South/Southeast Asian (e.g., Vietnamese, Malaysian) (n = 24), Middle Eastern (n = 15), East Asian (e.g., Chinese, Japanese, Korean) (n = 28), Native American (n = 9), Mexican/ Mexican-American (n = 8), and Pacific Islander (n = 5), with 30 non-responders. The majority of participants stated that they were currently living in the U.S. (n = 1133), though some stated that they currently lived outside of the USA (n = 233).

Participants likewise self-identified their sexual orientation/identity, which we categorized as heterosexual/straight (n = 809), gay/lesbian/homosexual (n = 208), bisexual/pansexual/pansexual/queer (n = 224), queer (n = 62), mostly heterosexual (n = 23), and demisexual/asexual (n = 16). Twelve participants gave responses that did not fit in any of these categories (e.g., flexible, polysexual, questioning/unsure, undefined). We then more broadly coded these categories into heterosexual (n = 824) and queer (which included anyone who did not strictly identify as heterosexual/straight) (n = 511) for analyses related to sexual orientation/identity. Grouping sexual orientation minorities into one category erases important nuances but allows for the possibility of analyses at a broad level.

# Measures

#### Health and Background Questionnaire

This included questions regarding demographic information such as gender/sex, age, race/ethnicity, education, income, occupation, disability.

#### Relationship Questionnaire

This questionnaire asked about current relationships, both romantic and sexual.

#### Sexuality Questionnaire

This included questions about sexual orientation and identity in addition to questions about recent and lifetime partnered and solitary sexual experiences, both physical and nonphysical (e.g., sexting).



This is a 65-item scale based on the suggested revisions that took place in Part A—developing the DESQ. Participants read the prompt: "When you have experienced desire for a partner, is it generally characterized by a desire to...?" and were asked to rank their agreement with various characterizations of desire (e.g., experience orgasm, make your partner feel happy) on a scale from 1 = strongly disagree to 7 = strongly agree. See Appendix for a full list of items.

Sexual Desire Inventory (SDI) (Spector et al., 1996)

This 15-item questionnaire measures both solitary and dyadic desire; desire is explicitly defined as desire for sexual activity (Spector et al., 1996). Items target participants' frequency of desire, strength of desire, and importance of fulfilling these desires. We incorporated this measure into the study because it is one of the most commonly used measures of sexual desire in healthy women and men, and it allowed us to assess convergent and divergent validity. The questionnaire resolves into three subscales for analyses: Solitary SDI, Dyadic SDI, and total SDI.

#### **Exclusion Questions**

In order to screen for non-serious and duplicate responses, we included the following questions: (1) Were any of your answers in this survey intended as jokes? (2) How many times have you taken this survey, including this time? Although we have no way of knowing how many participants answer these particular questions honestly, we have found that many did indicate that they were joking (n=9) and/or that they took the survey more than once (n=13), allowing us to easily exclude them from analyses.

# Additional Survey Items

Additional survey measures included the Personal Attributes Questionnaire (PAQ; [Helmreich, Spence, & Wilhelm, 1981]), Body Image Self-Consciousness Scale (BISC; [Wiederman, 2000]), Objectified Body Consciousness Scale (OBC Scale; [McKinley & Hyde, 1996]), Attitudes about Dating and Sexual Relationships (Ward, 2002), Competition Scale (adapted from Cashdan, 2003), and Perceived Stress Scale (PSS; [Cohen, Kamarck, & Mermelstein, 1983]). However, such measures were included for exploratory purposes only and we did not include analyses of them in this article.

# **Procedure**

We conducted data in two waves. Participants in Wave I completed the study questionnaires in the laboratory to provide saliva samples



for measures unrelated to the current analyses. We conducted Wave II online (without saliva samples) to increase our overall sample size and representation of sexual minorities.

#### Wave I

The study was approved by the University of Michigan Institutional Review Board. Participants were scheduled for testing between the hours of 11:00 and 19:00 during the months of September through November 2013. Upon arrival, participants were greeted by a member of the research team (comprised mostly of young adult ethnic majority women) and taken to a private testing room. They were then given a consent form to read and sign in agreement to participate. Participants were asked to complete an online survey comprised of the questionnaires described above. At the same time, participants were instructed to provide a saliva sample for measures unrelated to the current analyses. Upon completion of the study, participants were either given 1 hour of subject pool credit or compensated \$10, depending on their recruitment method.

#### Wave II

The study was approved by the University of Michigan Institutional Review Board. Upon clicking a survey link, participants were directed to an eligibility screening question, "Are you at least 18 years old?" Participants who clicked yes were forwarded to a consent form, where they could either consent or decline consent to participate in the study. Participants were then asked to complete an online survey comprised of the questionnaires described above. Upon completion of the study, participants were given either 0.5 hours of credit or the option to enter their email address into a raffle for a \$50 Amazon Gift Certificate, depending on their recruitment method. Email addresses were separated from participant responses to ensure anonymity.

### **Statistical Analyses**

Analyses were conducted using the Statistical Package for the Social Science (SPSS) version 21.0. Participants were excluded from analyses if they did not indicate that they were at least 18 years old, if they included non-serious responses, or if they indicated that they had taken the survey more than one time. Participants were also excluded if they did not complete at least 95% (62/65) of the DESQ items. All analyses were conducted after participant exclusions.

We conducted Exploratory Factor Analyses (EFAs) with Maximum Likelihood Extraction. EFA was chosen as the appropriate factor analysis because we theorized underlying structures to the 65 DESQ items based on Intimacy, eroticism, power, and desirability. The analysis was conducted using 1355 participants who completed at least 95% of the DESQ, ensuring that no variable had more than 1% missing

data. Because there were minimal missing data points, we imputed values using Expectation Maximization, ensuring a complete dataset in which to run the EFA as per Tabachnick and Fidell (2013). Analyses were run on the data with missing values and data with imputed values, and both produced the same pattern of results; thus, imputed values were retained. We used a varimax rotation because we hypothesized that the different facets of sexual desire may not be correlated.

#### Results

# **Item Analyses**

The distribution of responses was examined for each item of the DESQ. Analyses revealed that responses to some items were negatively skewed (e.g., items pertaining to pleasure or Intimacy) or positively skewed (e.g., items asking about reproduction, avoiding partner conflict, viewing erotica, relaxation).

# **Exploratory Factor Analysis**

Two empirical evaluations showed that the DESQ was appropriate for EFA: The Kaiser–Meyer–Oklin (KMO) measure was .96 and Bartlett's Test of Sphericity was significant,  $\chi^2(2080) = 52,059.76$ , p = .000. The analysis revealed nine factors with eigenvalues greater than 1, the combination of which explained 59.40% of the variance in scores. Given the relatively insubstantial decreases in eigenvalues and corresponding marginal increase in explained variance between factors 8 and 9, we chose to retain eight factors for analysis, explaining 57.65% of the variance. This decision was reinforced by the pattern matrix, as items captured by the ninth factor loaded more highly onto other dimensions.

The factors were: Intimacy, which explained 30.06% of the variance (e.g., items: "Feel emotionally close to your partner," "Make your partner feel that you are committed"), Eroticism, which explained 8.34% of the variance (e.g., items: "Feel sexually excited or aroused," "Experience orgasm"), Stress Relief/Relaxation, which explained 6.62% of variance (e.g., items: "Relieve stress," "Reconcile with your partner/end a fight"), Sexual Self-Esteem, which explained 3.40% of the variance (e.g., items: "Feel sexy," "Feel wanted/desired"), Partner Focus, which explained 2.93% of the variance (e.g., items: "Please your partner," "Make your partner feel happy"), Power/Control, which explained 2.32% of the variance (e.g., items: "Feel dominant/powerful," "Feel in control of your relationship"), Fantasy Experience, which explained 2.17% of the variance (e.g., items: "Act out a sexual fantasy," "View erotic films or read an erotic story"), and Thrill Seeking, which explained 1.81% of the variance (e.g., items: "Have a thrill," "Try something new"). The average score on each factor descended in the following order: Partner Focus (M = 6.03, SD = 1.48), Eroticism



(M = 5.61, SD = .96), Intimacy (M = 5.31, SD = 1.13), Thrill Seeking (M = 5.00, SD = 1.26), Sexual Self-Esteem (M = 4.96, SD = 1.25), Fantasy Experience (M = 3.80, SD = 1.43), Stress Relief/Relaxation (M = 3.63, SD = 1.16), Power/Control (M = 3.58, SD = 1.48).

We assigned each of the 65 descriptors to the DESQ factor on which it loaded most highly; however, seven descriptors (surprise your partner, experience desire for its own sake/no goal, reproduce, feel protected, feel independent and in control of your body, impress your partner, be dominated) failed to meet the minimum criterion of having a primary factor loading of .4 or above and were therefore not assigned to factors (see Table 1 for factor loadings and communalities). DESQ factors were all moderately positively correlated (see Table 2), exhibited high internal consistency (all  $\alpha s \ge .73$ ), and had eigenvalues greater than one (see Table 3).

#### The DESQ and the SDI (see Table 4)

Showing convergent validity, Dyadic SDI was significantly positively correlated with each of the eight DESQ factors (all rs[1328] = .21-.59, all ps < .05). Using Fisher's transformations to compare the strength of correlations, we found that Dyadic SDI and Eroticism exhibited stronger positive correlations than Dyadic SDI and all other factors (all ps < .05). Solitary SDI was also significantly positively correlated with each of the eight DESQ factors (all rs[1344] = .06-.32, all ps < .05). Using Fisher's transformations to compare the strength of correlations, we found that Solitary SDI and Eroticism, r(1344) = .26, p < .05), and Solitary SDI and Fantasy Experience, r(1344) = .32, p < .05, exhibited positive correlations that were significantly stronger than correlations between SDI Solitary and other factors (z = 2.02, p < .05; z = 3.61, p < .05).

### **DESQ** and Social Location

We performed an EFA with varimax rotation of the 65-item DESQ for four separate samples based on gender/sex and sexual orientation/identity: heterosexual women, queer women, heterosexual men, and queer men. Although the participant to item ratios for these subgroups are considered small by statistical convention, we proceeded with an Exploratory Factor Analysis (EFA) on each subgroup due to sufficient item communalities (67.69–78.46% of communalities were above .50 for each subgroup) as per MacCallum, Widaman, Zhang, and Hong (1999) (see Table 1). For each sample, we assigned each of the 65 descriptors to the DESQ factor on which it loaded most highly (see Table 2 for DESQ factor mean scores). Additionally for each sample, all DESQ factors had eigenvalues greater than one.

Heterosexual Women (n = 361)

Inspection of the rotated factor matrix suggested a seven-factor solution. The seven DESQ factors were: "Intimacy," "Eroticism/ Thrill Seeking, "Stress Relief/Relaxation," Fantasy Experience," "Partner Focus," "Sexual Self-Esteem," and "Power/Control." The percent of total variance explained by the seven DESQ factors was 57.32% (Table 3 lists the variance accounted for by each DESO factor). The average score on each factor descended in the following order: Partner Focus (M = 5.64, SD = 1.24), Eroticism/ Thrill Seeking (M=5.31, SD=1.02), Intimacy (M=5.11,SD = 1.14), Sexual Self-Esteem (M = 4.98, SD = 1.35), Stress Relief/Relaxation (M = 4.08, SD = 1.34), Power/Control (M =3.43, SD = 1.42), Fantasy Experience (M = 3.32, SD = 1.27). Six descriptors (impress your partner, fall asleep, avoid conflict with your partner, reproduce, surprise your partner, feel independent and in control of your body) failed to meet a minimum criterion of having a primary factor loading of .4 or above and were eliminated from factor assignment. DESQ factors exhibited high internal consistency (all  $\alpha s \ge .72$ ; see Table 3) and were all significantly positively correlated (see Table 2). Emergent factors for heterosexual women were similar to the broad sample, with the exception that Eroticism and Thrill Seeking pooled into a single factor. Despite similar emergent factors, some items loaded onto different factors when assessing heterosexual women relative to the broad sample (see Table 5).

Queer Women (n = 234)

Inspection of the rotated factor matrix suggested a nine-factor solution. The nine DESQ factors were: "Intimacy," "Eroticism," "Stress Relief/Relaxation," "Partner Focus," "Sexual Self-Esteem," "Thrill Seeking," "Power/Control," "Relationship Management/Reproduction," and "Fantasy Experience." The percent of total variance explained by the nine DESQ factors was 54.90% (see Table 3). The average score on each factor descended in the following order: Partner Focus (M =6.18, SD = .87), Eroticism (M = 5.72, SD = 1.00), Intimacy (M = 5.33, SD = 1.07), Sexual Self-Esteem (M = 5.07, SD =1.20), Thrill Seeking (M = 4.94, SD = 1.32), Stress Relief/ Relaxation (M = 4.07, SD = 1.37), Fantasy Experience (M =3.79, SD = 1.46), Power/Control (M = 3.51, SD = 1.70), Relationship Management/Reproduction (M = 2.60, SD = 1.22). Eight descriptors (feel happy, surprise your partner, experience desire for its own sake/no goal, end craving, be dominated, feel independent and in control of your body, impress your partner, and fall asleep) failed to meet a minimum criterion of having a primary factor loading of .4 or above and were eliminated from factor assignment. The item, "boost self-esteem/feel good about



**Table 1** Items, factor loadings (FL), and communalities (Comm) for the Sexual Desire Questionnaire (DESQ) across the entire sample and by gender/sex-sexual orientation/identity

Factor	Item	Entir	e sample	Subgr	oups						
		FL	Comm	Hetero		Queer	women	Heteros	sexual	Queer 1	men
				FL	Comm	FL	Comm	FL	Comm	FL	Comm
Intimacy	Feel emotionally closer to your partner	.836	.753	.798	.733	.823	.758	.888	.854	.841	.874
	Grow closer to your partner or develop a stronger connection with him/her	.828	.737	.802	.728	.853	.816	.860	.783	.826	.781
	Make your partner feel emotionally closer to you	.782	.676	.773	.716	.752	.701	.781	.688	.814	.745
	Feel a sense of commitment from your partner	.750	.605	.772	.661	.712	.556	.693	.683	.770	.697
	Feel loved	.748	.684	.801	.764	.677	.654	.767	.775	.722	.751
	Make your partner feel that you are committed	.746	.674	.793	.693	.649	.643	.645	.767	.747	.642
	Show your partner that you care	.702	.624	.646	.640	.678	.608	.765	.715	.722	.704
	Make your partner feel that you are supportive of him/her	.693	.642	.669	.663	.709	.652	.672	.694	.727	.748
	Feel a sense of support from your partner	.691	.616	.757	.707	.663	.584	.641	.632	.704	.671
	Feel more secure about your relationship with your partner		.628	.762	.718	.635	.692	.575	.716	.710	.662
	Experience romance	.673	.537	.573	.502	.673	.585	.764	.669	.690	.632
	Initiate or maintain a romantic relationship	.656	.504	.686	.535	.612	.464	.649	.562	.621	.513
	Express love for your partner	.649	.572	.521	.560	.559	.554	.763	.638	.708	.642
	Make your partner feel special	.626	.632	.584	.749	.589	.656	.727	.718	.633	.681
	Make your partner feel more secure about your relationship with him/her	.624	.576	.607	.621	.553	.674	.578	.718	.650	.587
	Feel cared for	.615	.597	.687	.629	.680	.737	.549	.607	.583	.822
	Experience intimacy	.592	.631	.532 <sup>b</sup>	.702	.618	.641	.694	.594	.601	.671
	Experience companionship	.584	.513	.467	.573	.663	.634	.642	.579	.575	.515
	Cuddle with your partner	.568	.411	.546	.536	.547	.460	.630	.549	.510	.555
	Make your partner feel wanted/desired	.562	.626	.493	.708	.541	.650	.697	.711	.500	.439
	Be protective	.443	.425	.431	.393	.428	.550	.441	.522	.477 <sup>f</sup>	.510
Eroticism	Experience physical pleasure	.800	.679	.840	.801	.792	.673	.752	.632	.753	.688
	Feel sexually satisfied	.791	.673	.776	.672	.805	.723	.722	.718	.797	.708
	Feel sexually excited or aroused	.696	.593	.821	.744	.682	.678	.636	.599	.556	.579
	Touch your partner's body	.674	.583	.699	.815	.662	.570	.617	.720	.568	.551
	Make yourself feel good	.619	.518	.640	.609	.582	.601	.659	.560	.527	.540
	Experience orgasm	.591	.402	.567	.418	.621	.458	.568	.431	.443	.446
	Be physically close to your partner in a sexual way	.543	.638	.654	.716	.629	.686	.706 <sup>a</sup>	.703	.420a	.486
	See your partner naked	.538	.451	.481	.542	.466	.529	.482	.608	.505	.433
	Be touched	.481	.505	.662	.646	.539	.504	.408a	.609	<.4	.412
	Experience specific sexual activities	.463	.412	.524	.499	.510	.560	.401	.380	.533 <sup>g</sup>	.500
	Feel happy	.456	.479	.502	.550	<.4	.447	.503 <sup>a</sup>	.557	.433	.574
	End a craving	.434	.325	.484	.442	<.4	.392	<.4	.346	.535	.415



Table 1 continued

Factor	Item	Entire	sample	Subgroups							
		FL	Comm	Heteros		Queer	vomen	Heteros	sexual	Queer r	nen
				FL	Comm	FL	Comm	FL	Comm	FL	Comm
Stress Relief/	Relieve tension/frustration	.756	.693	.795	.796	.843	.813	.737	.653	.683	.781
Relaxation	Relieve stress	.658	.590	.679	.651	.687	.650	.678	.560	.583	.527
	Be distracted from some other anxiety- provoking issue	.609	.402	.611	.424	.658	.514	.632	.465	.577	.363
	Alleviate boredom	.530	.346	.471	.374	.529	.366	.554	.379	.456	.405
	Experience relaxation	.512	.490	.556	.567	.404	.569	.492	.496	.503	.583
	Reconcile with your partner/end a fight	.443	.355	.438 <sup>g</sup>	.392	.545 <sup>i</sup>	.569	.448	.411	<.4	.499
	Fall asleep	.443	.229	<.4	.326	<.4	.343	.439	.261	.447	.316
	Avoid conflict with your partner	.439	.376	<.4	.404	.709 <sup>i</sup>	.642	.453	.498	<.4	.424
Sexual Self-	Feel wanted/desired	.573	.507	.617	.598	.566	.531	.507	.625	.450	.439
Esteem	Feel irresistible	.555	.486	.551	.546	.642	.591	.528	.481	.522	.509
	Feel sexy	.506	.500	.492 <sup>b</sup>	.598	.494	.634	.498	.539	.632	.662
	Feel special	.503	.580	.587 <sup>a</sup>	.662	.410	.573	.525	.548	.437	.633
	Boost your self-esteem or feel good about yourself	.482	.529	.483	.530	.451	.638	.587	.560	.438	.501
Partner Focus	Please your partner	.662	.714	.707	.790	.753	.771	.536 <sup>a</sup>	.707	.700	.652
	Make your partner feel happy	.655	.703	.715	.815	.644	.645	.526	.687	.777	.793
	Give your partner physical pleasure	.650	.684	.663	.704	.654	.648	.633	.807	.711	.446
Power/Control	Experience Power/Control	.784	.756	.785	.798	.770	.727	.767	.772	.746	.635
	Feel dominant/powerful	.743	.661	.643	.541	.763	.687	.797	.773	.689	.551
	Feel in control of your relationship	.404	.488	.424	.501	$.431^{i}$	.537	.428 <sup>d</sup>	.530	.584	.621
Fantasy	Act out a sexual fantasy	.676	.614	.662	.611	.779	.832	.585	.468	.792	.768
Experience	Fantasize	.618	.570	.699	.681	.608	.588	.517	.386	.643	.615
	View erotic films or read an erotic story	.525	.359	.505	.316	.509	.378	.461	.297	.515	.415
Thrill Seeking	Do something exciting	.636	.680	.477 <sup>b</sup>	.582	.685	.681	.615	.626	.887	.999
	Have a thrill	.542	.557	.472 <sup>b</sup>	.510	.585	.588	.511	.483	.465	.490
	Try something new	.467	.501	.416 <sup>b</sup>	.494	.672	.591	.420	.423	.509 <sup>g</sup>	.539
Did not load (FL	Surprise your partner	<.4	.369	<.4	.489	<.4	.423	<.4	.413	<.4	.501
<.4)	Experience desire for its own sake/no goal	<.4	.229	.422 <sup>b</sup>	.295	<.4	.335	<.4	.216	<.4	.286
	Reproduce	<.4	.164	<.4	.255	.445 <sup>i</sup>	.265	<.4	.214	<.4	.116
	Feel protected	<.4	.409	.446 <sup>a</sup>	.464	.447 <sup>a</sup>	.515	<.4	.389	.433 <sup>a</sup>	.620
	Feel independent and in control of your body	<.4	.382	<.4	.442	<.4	.453	.468 <sup>d</sup>	.478	.469 <sup>f</sup>	.463
	Impress your partner	<.4	.419	<.4	.411	<.4	.480	.583 <sup>d</sup>	.570	<.4	.387
	Be dominated	<.4	.239	.447 <sup>g</sup>	.380	<.4	.382	<.4	.262	.479 <sup>g</sup>	.418

Items that loaded onto a different factor in subgroup assessments relative to the entire sample are indicated by subscript letters. Each subscript letter designates the factor on which the item loads for that subgroup

<sup>&</sup>lt;sup>i</sup> Relationship Management/Reproduction



<sup>&</sup>lt;sup>a</sup> Intimacy

<sup>&</sup>lt;sup>b</sup> Eroticism

<sup>&</sup>lt;sup>c</sup> Stress Relief/Relaxation

d Sexual Self-Esteem

<sup>&</sup>lt;sup>e</sup> Partner Focus

f Power/Control

<sup>&</sup>lt;sup>g</sup> Fantasy Experience

h Thrill seeking

 Table 2
 Correlations among DESQ factors for each sample

	1. Intimacy	2. Eroticism	3. Stress Relief/ Relaxation	4. Sexual Sel Esteem	f- 5. Partner Focus	6. Powe	er/Control	7. Fantasy exp.	M	SD
Entire sample $(n = 1355)$										
1. Intimacy									5.31	1.13
2. Eroticism .	520**								5.61	.96
3. Stress Relief/ . Relaxation	355**	.396**							3.63	1.16
4. Sexual Self-Esteem .	579**	.565**	.432**						4.96	1.25
5. Partner Focus .	577**	.567**	.163**	.366**					6.03	1.48
6. Power/Control .	314**	.332**	.446**	.458**	.166**				3.58	1.48
7. Fantasy exp.	282**	.417**	.399**	.334**	.237**	.406**			3.80	1.43
8. Thrill seeking .	347**	.588**	.424**	.485**	.375**	.380**		.445**	5.00	1.20
	1. Intimacy	2. Eroticism/ Thrill Seekin	3. Stress Relief g Relaxation	f/ 4. Fantasy	exp. 5. Partno	er Focus	6. Sexual S	Self-Esteem	М	SD
Heterosexual women ( $n = 36$	1)									
1. Intimacy									5.11	1.14
2. Eroticism/Thrill Seeking	.491**								5.31	1.02
3. Stress Relief/Relaxation	.253**	.487**							4.08	1.34
4. Fantasy exp.	.286**	.461**	.450**						3.32	1.27
5. Partner Focus	.535**	.560**	.197**	.217**					5.64	1.24
6. Sexual Self-Esteem	.499**	.616**	.399**	.353**	.371**				4.98	1.35
7. Power/Control	.326**	.461**	.439**	.487**	.150**		.428**		3.43	1.42
	1. Intima	cy 2. Eroticisi	m 3. Stress Relies Relaxation		5. Sexual Self-Esteem			8. Relationship Management/ Reproduction	) M	SD
Queer women $(n = 234)$										
1. Intimacy										1.07
2. Eroticism	.445**								5.72	1.00
3. Stress Relief/Relaxation	.342**	.342**								1.37
4. Partner Focus	.521**	.463**	.121						6.18	.87
5. Sexual Self-Esteem	.542**	.522**	.430**	.369**					5.07	1.20
6. Thrill seeking	.351**	.494**	.385**	.319**	.490**				4.94	1.32
7. Power/Control	.237**	.270**	.255**	.168*	.366**	.362**			3.51	1.70
8. Relationship Management Reproduction	:/ .396**	.131*	.482**	.107	.309**	.244**	.362**		2.60	1.22
9. Fantasy exp.	.232**	.383**	.298**	.204**	.323**	.388**	.364**	.261**	3.79	1.46
	1. Intima	acy 2. Erotici	sm 3. Stress Reli Relaxation		1 5. Fant eem/ exp.	asy 6. P	ower 7. P	artner Focus	М	SD
Heterosexual men $(n = 461)$										
1. Intimacy									5.52	1.05
2. Eroticism	.471**								5.95	.81
3. Stress Relief/Relaxation	.315**	.276**							3.73	1.13
4. Sexual Self-Esteem/contro	ol .626**	.469**	.468**						4.16	1.04
5. Fantasy exp.	.290**	.356**	.353**	.351**					4.12	
J. I unusy CAp.	.270	.550	.555	.551						1.2.



Table 2 continued

	1. Intima	cy 2. Erotic	cism 3. Stres Relaxat	ion S	l. Sexual Self-Esteem/ Control	5. Fantasy exp.	6. Power 7. P	artner Focus	M	SD
7. Partner Focus 8. Thrill seeking	.607** .342**	.493** .517**	.065 .355**		299** 404**	.138** .410**	.024 .264** .332	2**	6.31 5.23	.92 1.09
		1. Intimacy	2. Eroticism	3. Fantasy exp.	4. Power/ Control	5. Stress Relief/ Relaxation	6. Partner Focus	7. Sexual Self- Esteem	М	SD
Queer men $(n = 241)$	1)									
1. Intimacy									5.11	1.00
2. Eroticism		.431**							5.63	.86
3. Fantasy exp.		.315**	.426**						4.35	1.20
4. Power/Control		.349**	.356**	.488**					3.66	1.28
5. Stress Relief/ Relaxation		.269**	.490**	.441**	.413**				3.91	1.20
6. Partner Focus		.487**	.228**	.244**	.184**	.111			6.11	.94
7. Sexual Self-Este	em	.468**	.492**	.537**	.523**	.485	.266**		4.87	1.16
8. Thrill seeking		.206**	.466*	.497**	.426**	.459	.160*	.423**	5.17	1.27

<sup>\*</sup> Correlation is significant at the .05 level (two-tailed)

yourself,"loaded equally onto its own factor and the self-esteem factor, and therefore, it was included in the self-esteem factor. DESQ factors exhibited high internal consistency (all  $\alpha s \ge .72$ ; see Table 3) and were all significantly positively correlated except for Partner Focus and Relationship Management/Reproduction, r(234)=.107, p=ns (see Table 2). Emergent factors for queer women were similar to the broad sample, but also included an additional factor characterized by relationship management and reproduction items. Despite similar emergent factors, some items loaded onto different factors when assessing queer women relative to the broad sample (see Table 5).

### Heterosexual Men (n = 461)

Inspection of the rotated factor matrix suggested an eight-factor solution. The eight DESQ factors for this sample were: "Intimacy," "Eroticism," "Stress Relief/Relaxation," "Sexual Self-Esteem/Control," "Fantasy Experience," "Power," "Partner Focus," and "Thrill Seeking." The percent of total variance explained by the eight DESQ factors was 58.43% (see Table 3). The average score on each factor descended in the following order: Partner Focus (M = 6.31, SD = .92), Eroticism (M = 5.95, SD = .81), Intimacy (M = 5.52, SD = 1.05), Thrill Seeking (M = 5.23, SD = 1.09), Sexual Self-Esteem/Control (M = 4.16, SD = 1.04), Fantasy Experience (M = 4.12, SD = 1.27), Power (M = 3.84, SD = 1.70), Stress Relief/Relaxation (M = 3.73, SD = 1.13). Six descriptors (surprise your partner, end craving, experience desire for its own sake/no goal, feel protected, be dominated, and reproduce)

failed to meet a minimum criterion of having a primary factor loading of .4 or above and were eliminated from factor assignment. DESQ factors exhibited moderate to high internal consistency (all  $\alpha s \ge .64$ ; see Table 3) and were all significantly positively correlated except for Stress Relief/Relaxation and Partner Focus, r(461) = .065, and Power and Partner Focus, r(461) = .024 (see Table 2). Emergent factors for heterosexual men were similar to the broad sample, with the exception that the Sexual Self-Esteem was also characterized by Control items. Despite similar emergent factors, some items loaded onto different factors when assessing heterosexual men relative to the broad sample (see Table 5).

#### Queer Men (n = 241)

Inspection of the rotated factor matrix suggested an eight-factor solution. The eight DESQ factors were: "Intimacy," "Eroticism," "Fantasy Experience," "Power/Control," "Stress Relief/Relaxation," "Partner Focus," "Sexual Self-Esteem," and "Thrill Seeking." The percent of total variance explained by the eight DESQ factors was 57.42% (see Table 3). The average score on each factor descended in the following order: Partner Focus (M = 6.11, SD = .94), Eroticism (M = 5.63, SD = .86), Thrill Seeking (M = 5.17, SD = 1.27), Intimacy (M = 5.11, SD = 1.00), Sexual Self-Esteem (M = 4.87, SD = 1.16), Fantasy Experience (M = 4.35, SD = 1.20), Stress Relief/Relaxation (M = 3.91, SD = 1.20), Power/Control (M = 3.66, SD = 1.28). Seven descriptors (surprise your partner, reconcile with your partner/end a fight, impress your partner, reproduce, avoid conflict with your partner, experience



<sup>\*\*</sup> Correlation is significant at the .01 level (two-tailed)

 Table 3
 DESQ factors resulting from EFAs

Sample	DESQ factors	Examples of items compiling DESQ factor	Number of items on DESQ factor		Percent of variance (%)	Eigenvalue
Entire sample $(n = 1355)$	1. Intimacy	Feel emotionally closer to your partner	21	$\alpha = .96$	30.06	19.54
	2. Eroticism	Experience orgasm, feel sexually excited or aroused	12	$\alpha = .90$	8.34	5.42
	3. Stress Relief/ Relaxation	Relieve stress, reconcile with your partner/end a fight	8	$\alpha = .82$	6.62	4.30
	4. Sexual Self-Esteem	Feel sexy, feel wanted/desired	5	$\alpha = .82$	3.40	2.21
	5. Partner Focus	Please your partner	3	$\alpha = .88$	2.93	1.91
	6. Power/Control	Feel dominant/powerful, feel in control of your relationship	3	$\alpha = .76$	2.32	1.51
	7. Fantasy Experience	Act out a sexual fantasy	3	$\alpha = .73$	2.17	1.41
	8. Thrill seeking	Have a thrill, try something new	3	$\alpha = .78$	1.81	1.18
Heterosexual women	1. Intimacy	Feel emotionally closer to your partner	22	$\alpha = .95$	29.53	19.20
(n = 361)	2. Eroticism/Thrill Seeking	See your partner naked, have a thrill	18	$\alpha = .93$	9.41	6.17
	3. Stress Relief/ Relaxation	Relieve stress, experience relaxation	5	$\alpha = .82$	7.16	4.65
	4. Fantasy Experience	Act out a sexual fantasy, be dominated	5	$\alpha = .74$	3.76	2.44
	5. Partner Focus	Please your partner	3	$\alpha = .86$	2.92	1.90
	6. Sexual Self-Esteem	Feel wanted/desired	3	$\alpha = .72$	2.47	1.61
	7. Power/Control	Feel dominant/powerful	3	$\alpha = .74$	2.07	1.35
Queer women $(n = 234)$	1. Intimacy	Feel emotionally closer to your partner	22	$\alpha = .95$	27.73	18.02
	2. Eroticism	Experience orgasm, feel sexually excited or aroused	10	$\alpha = .89$	8.35	5.43
	3. Stress Relief/ Relaxation	Relieve stress, experience relaxation	5	$\alpha = .81$	6.92	4.50
	4. Fantasy Experience	Act out a sexual fantasy	3	$\alpha = .74$	3.87	2.51
	5. Partner Focus	Please your partner	3	$\alpha = .83$	2.97	1.93
	6. Sexual Self-Esteem	Feel sexy, feel wanted/desired	5	$\alpha = .81$	2.62	1.70
	7. Thrill seeking	Have a thrill	3	$\alpha = .80$	2.45	1.59
	8. Power/Control	Feel dominant/powerful	2	$\alpha = .82$	2.27	1.47
	9. Relationship Management/ Reproduction	Avoid conflict with your partner	4	$\alpha = .72$	2.05	1.45
Heterosexual men $(n=461)$	1. Intimacy	Feel emotionally closer to your partner	25	$\alpha = .96$	30.10	19.56
	2. Eroticism	Experience specific sexual activities, experience orgasm	8	$\alpha = .86$	8.70	5.66
	3. Stress Relief/ Relaxation	Relieve stress, experience relaxation	8	$\alpha = .77$	6.75	4.39
	4. Sexual Self- Esteem/control	Feel wanted/desired, feel in control of your relationship	8	$\alpha = .86$	3.37	2.19
	5. Fantasy Experience	Act out a sexual fantasy	3	$\alpha = .64$	3.07	1.99
	6. Power	Feel dominant/powerful	2	$\alpha = .86$	2.41	1.57
	7. Partner Focus	Give your partner physical pleasure	2	$\alpha = .85$	2.09	1.36
	8. Thrill seeking	Have a thrill	3	$\alpha = .71$	1.95	1.27



Table 3 continued

Sample	DESQ factors	Examples of items compiling DESQ factor	Number of items on DESQ factor	Internal consistency	Percent of variance (%)	Eigenvalue
Queer men $(n = 241)$	1. Intimacy	Feel emotionally closer to your partner	22	$\alpha = .95$	26.97	17.53
	2. Eroticism	Experience orgasm	9	$\alpha = .84$	10.08	6.55
	3. Fantasy Act out a sexual fantasy Experience		6	$\alpha = .80$	4.90	3.19
	4. Power/Control	Experience Power/Control	5	$\alpha = .79$	4.11	2.67
	5. Stress Relief/ Relaxation	Relieve stress, experience relaxation	6	$\alpha = .78$	3.55	2.31
	6. Partner Focus	Please your partner	3	$\alpha = .84$	2.80	1.82
	7. Sexual Self- Feel wanted/desired Esteem		5	$\alpha = .78$	2.70	1.75
	8. Thrill seeking	Have a thrill	2	$\alpha = .75$	2.31	1.50

Table 4 DESQ factor correlations with Sexual Desire Inventory (SDI)

-		•
	DESQ factor correlate	r
Dyadic SDI	Intimacy	.329*
	Eroticism	.595*
	Stress Relief/Relaxation	.216*
	Sexual Self-Esteem	.310*
	Partner Focus	.435*
	Power/Control	.215*
	Fantasy Experience	.336*
	Thrill seeking	.402*
Solitary SDI	Intimacy	.062*
	Eroticism	.265*
	Stress Relief/Relaxation	.106*
	Sexual Self-Esteem	.095*
	Partner Focus	.191*
	Power/Control	.104*
	Fantasy Experience	.321*
	Thrill seeking	.153*

<sup>\*</sup> Significant positive correlation at p < .05

desire for its own sake/no goal, and be touched) failed to meet a minimum criterion of having a primary factor loading of .4 or above and were eliminated from factor assignment. DESQ factors exhibited high internal consistency (all  $\alpha s \ge .75$ ; see Table 3) and were all significantly positively correlated except for Stress Relief/Relaxation and Partner Focus, r(241) = .11 (see Table 2). Emergent factors for queer men were similar to the broad sample; however, some items loaded onto different factors when assessing queer men relative to the broad sample (see Table 5).

#### **Discussion**

The purpose of this study was to explore multifaceted sexual desire and its relation to gender/sex and sexuality, but, to do so, we needed to develop a measure of multifaceted sexual desire.

We thus developed the multifaceted DESO to assess the factor structure in a broad sample of participants. Our results indicate that the DESQ is multifactorial and demonstrates evidence of internal consistency. Furthermore, results with the DESQ suggest that sexual desire is a multifaceted phenomenon that has characterizations of eroticism alongside nurturant and other nonerotic factors. Additionally, we found that the construction of multifaceted sexual desire shares many commonalities across groups, emphasizing the utility of DESQ factors. However, results also indicate that the construction of multifaceted sexual desire may not be experienced exactly the same in all groups of people, suggesting that the DESQ can be used as an assessment tool specific to social groups without assuming generalization across groups. The results also highlight the importance of evaluating multifaceted desire based on social location variables like gender/sex and sexual orientation/identity.

# The DESQ and Multifaceted Sexual Desire in a Broad Sample

Using a factor analytic, bottom-up approach, we examined the structure of the DESQ. For the broad study sample, i.e., including all participants, the solution had eight DESQ factors: Intimacy, Eroticism, Stress Relief/Relaxation, Sexual Self-Esteem, Partner Focus, Power/Control, Fantasy Experience, and Thrill Seeking, which accounted for 57.65% of the explained variance of all descriptors. EFA confirmed the validity of the questionnaire's structure, and measures of internal consistency provided strong evidence for the reliability of the DESQ and its factors.

Results of the EFA contrast with previous lay and academic assertions of sexual desire as having a unitarily erotic nature. The Intimacy factor, reflecting desires to develop or maintain a connection with another person (e.g., desires to feel emotionally closer to your partner, show your partner that you care, make your partner feel that you are committed), accounted for the most variance of all the DESQ factors, though this could be



**Table 5** DESQ items for each factor by group analysis

Factor	Entire sample ( $n = 1355$ )	Heterosexual women $(n=361)$	Queer women $(n = 234)$	Heterosexual men $(n = 461)$	Queer men $(n = 241)$
Intimacy	Experience companionship	Feel protected+	Feel protected+	Feel happy+	Feel protected+
	Express love for your partner	Feel special+		Be physically close to your partner in a sexual way+	Be physically close to your partner in a sexual way+
	Make your partner feel emotionally closer to you	Experience intimacy—		Please your partner+	Be protective—
	Make your partner feel wanted/desired			Be touched+	
	Make your partner feel more secure about your relationship with him/her				
	Feel a sense of commitment from your partner				
	Experience intimacy				
	Show your partner that you care				
	Feel cared for				
	Be protective				
	Initiate or maintain a romantic relationship				
	Feel loved				
	Experience romance				
	Feel emotionally closer to your partner				
	Make your partner feel that you are committed				
	Cuddle with your partner				
	Feel more secure about your relationship with your partner				
	Make your partner feel that you are supportive of him/her				
	Make your partner feel special				
	Feel a sense of support from your partner				
	Grow closer to your partner or develop a stronger connection with him/her				



Table 5 continued

Factor	Entire sample $(n = 1355)$	Heterosexual women $(n = 361)$	Queer women $(n = 234)$	Heterosexual men $(n = 461)$	Queer men $(n = 241)$
Eroticism	Experience orgasm	Try something new+	Feel happy—	Feel happy—	Experience specific sexual activities—
	Be touched	Do something exciting+	End craving—	End craving—	Be touched—
	Experience specific sexual activities	Feel sexy+		Be touched—	Be physically close to your partner in a sexual way—
	Feel happy	Experience intimacy+		Be physically close to your partner in a sexual way—	
	Feel excited or aroused	Have a thrill+			
	Feel sexually satisfied	Experience desire for its own sake/no goal+			
	Be physically close to your partner in a sexual way				
	End craving				
	Touch your partner's body				
	See your partner naked Make yourself feel good				
	Experience physical				
	pleasure				
Stress Relief/ Relaxation	Relieve stress	Fall asleep—	Fall asleep—		Reconcile with your partner/end a fight—
	Be distracted from some other anxiety-provoking issue	Reconcile with your partner/end a fight—	Reconcile with your partner/end a fight—		Avoid conflict with your partner—
	Fall asleep	Avoid conflict with your partner—	Avoid conflict with your partner—		
	Alleviate boredom				
	Reconcile with your partner/end a fight				
	Relieve tension/frustration				
	Avoid conflict with your partner				
	Experience relaxation				
Sexual Self- Esteem	Feel wanted/desired	Feel sexy-		Feel in control of your relationship+	
	Feel irresistible	Feel special—		Feel independent and in control of your body+	
	Feel sexy			Impress your partner+	
	Feel special				
	Boost your self-esteem or feel good about yourself				
Partner Focus	Give your partner physical pleasure			Please your partner—	
	Make your partner feel happy				
	Please your partner				



$T_{9}$	h	ما	5	continued

Factor	Entire sample $(n = 1355)$	Heterosexual women $(n = 361)$	Queer women $(n = 234)$	Heterosexual men $(n=461)$	Queer men $(n = 241)$
Power/Control	Feel dominant/ powerful		Feel in control of your relationship—	Feel in control of your relationship—	
	Experience Power/ Control				
	Feel in control of your relationship				
Fantasy Experience	Act out a sexual fantasy	Be dominated+			Be dominated+
	Fantasize	Reconcile with your partner/end a fight+			Experience specific sexual activities+
	View erotic films or read an erotic story				Try something new+
Thrill seeking	Thrill seeking	Thrill seeking-			
	Try something new	Try something new-			Try something new-
	Do something exciting	Do something exciting—			
Relationship Management/			Avoid conflict with your partner+		
Reproduction			Reconcile with your partner/end a fight+		
			Reproduce+		
			Feel in control of your relationship+		
Did not load <.4	Surprise your partner	Fall asleep+	Fall asleep+	End craving+	Reconcile with your partner/end a fight+
	Experience desire for its own sake/no goal	Avoid conflict with your partner+	End craving+	Feel independent and in control of your body—	Be touched+
	Reproduce Experience desire for its own sake/no goal—		Feel happy+	Impress your partner—	Avoid conflict with your partner+
	Feel protected	Feel protected-	Feel protected-		Feel protected-
	Feel independent and in control of your body	Be dominated—	Reproduce—		Feel independent and in control of your body—
	Impress your partner Be dominated				Be dominated—

<sup>+</sup> Item additionally characterizes factor relative to entire sample

due to Intimacy being comprised of a larger number of items than the other factors. An Eroticism factor of desire, characterized by erotic desires (e.g., desire to experience orgasm, feel sexually excited or aroused, experience physical pleasure), accounted for less of the questionnaire's total variance relative to emotional connectedness, despite it arguably mapping on more closely to lay and pretheoretical assumptions about what sexual desire represents. While this merely could represent item input, the finding clearly suggests that subjective experience of sexual desire is not universally characterized by an erotic aspect of desire alone. Rather, the presence of seven other DESQ factors besides Eroticism supports our hypothesis that

sexual desire is neither unitary nor completely erotic and confirms suggestions from past and concurrent studies regarding the existence of multifaceted forms of sexual desire (Goldhammer & McCabe, 2011; Mark et al., 2014; Meana, 2010; van Anders, 2012b, 2013).

Not only do these findings support conceptualizing desire as multifaceted, they further support some suggestions that an erotic characterization of desire may not even be the most *important* aspect of sexual desire for many people (Beck et al., 1991; Brotto, 2010). On average, participants (women *and* men) scored highest on the Partner Focus DESQ factor, not Eroticism, suggesting that, in this sample, sexual desire was characterized more highly by the



<sup>-</sup> Item did not characterize factor relative to entire sample

desire to please a partner than by the desire to experience genital pleasure. This suggests that though eroticism may be a popular factor of multifaceted sexual desire, it may not be the most important to at least some people, generally.

#### The DESQ and the SDI

Dyadic sexual desire, as measured by the SDI, was significantly positively correlated with each of the eight DESQ factors, providing support for the validity of the DESQ. Interestingly, Dyadic SDI was most strongly correlated with the Eroticism factor, suggesting that Eroticism does represent an important facet of sexual desire. Solitary sexual desire, as measured by the SDI, was also significantly positively correlated with all DESQ factors. Notably, Solitary SDI was most strongly correlated with Eroticism and Fantasy Experience, as we have predicted (van Anders, 2012b); several descriptors compiling these DESQ factors can be applied to solitary sexual desire (e.g., desire to make yourself feel good, desire to feel sexually excited or aroused, desire to fantasize).

# Social Location and the Construction of Multifaceted Sexual Desire

We investigated the characterizations of multifaceted sexual desire in groups subdivided by gender/sex and sexual orientation/identity, using separate EFAs of the DESQ for heterosexual women, queer women, heterosexual men, and queer men.

Mirroring the results of the broad sample EFA, each of the four groups was commonly characterized by an Intimacy DESQ factor, suggesting that dyadic sexual desire is a ubiquitously nurturant phenomenon. Also, each group scored highest on their relative Partner Focus factors, providing further evidence that eroticism may not be the only or most important aspect of sexual desire.

Notably, the general factor structure of the DESQ held up across groups with only some differences, suggesting that there are many similarities in how individuals who differ by gender/sex and sexuality experience sexual desire. For example, Intimacy, Eroticism, Stress Relief/Relaxation, Sexual Self-Esteem, Partner Focus, Power/Control, Fantasy Experience, and Thrill Seeking factors all emerged for queer women, heterosexual men, and queer men. Heterosexual women presented a similar structure, with the exception that Eroticism and Thrill Seeking pooled into a single factor. Only the analysis with queer women presented an additional factor: Relationship Management/Reproduction. Thus, our results indicate that the DESQ presents generally reliable factor themes that may be useful in future assessments of multifaceted sexual desire.

Importantly, although these results show similar factor *themes* across groups, the evidence also indicates that assuming the themes have the same meaning across groups is problematic. In assessing the DESQ by gender/sex orientation/identity, we found that many

DESO items loaded onto different factors than when the DESO was assessed for the broad sample, suggesting that constructs of Intimacy, eroticism, power, Sexual Self-Esteem, etc., are themselves multifaceted and are characterized differently by different groups of people. This implies that collapsing factors based on the broad sample would erase nuances that may be important and unique to the lived experiences of individuals occupying these differing social locations. Thus, the factors that emerged from the broad sample may only partially represent how certain individuals experience that construct, and comparisons across different groups should be interpreted in this light. For example, Intimacy thematically emerged as a factor for each group, indicating that we can generally make comparisons of Intimacy as a facet of sexual desire across everyone; however, each group's Intimacy factor included items that were not present in the Intimacy factor for the broad sample, suggesting that Intimacy can be constructed differently between groups. Heterosexual women's Intimacy was additionally characterized by the items "feel special" and "feel protected"; queer women's Intimacy was additionally characterized by the item "feel protected"; heterosexual men's Intimacy was additionally characterized by the items "please your partner," "feel happy," "be physically close to your partner in a sexual way," and "be touched"; and queer men's Intimacy was additionally characterized by the items "be physically close to your partner in a sexual way" and "feel protected." Furthermore, items that characterized Intimacy for the broad sample did not necessarily characterize Intimacy for each group: Heterosexual women's Intimacy was not characterized by the item "experience intimacy"; heterosexual men's Intimacy was not characterized by the item "feel more secure about your relationship with your partner"; and queer men's Intimacy was not characterized by the item, "be protective." Therefore, to compare heterosexual women, queer women, heterosexual men, and queer men on Intimacy scores using the same broad sample factor constructed via the same items would not capture important group nuances (see Table 4 for a list of factor items by broad sample and group). We thus do not recommend using preexisting DESQ subscales, as is traditional in measurement development. Instead, constructs should be determined by sample, when possible, or within social groups. Comparisons, when desired, can be made across DESQ factor themes, but results should be interpreted via consideration of social location and context. Comparisons can also be made across the DESQ total score, as an assessment of multifaceted desire as a whole, or across individual DESQ items.

# General Conclusions, Limitations, and Future Directions

Overall, the DESQ was shown to be an appropriate assessment tool for multifaceted sexual desire. Furthermore, results using the DESQ emphasized that sexual desire is not necessarily or only erotic in nature, but rather may include characterizations relating to Intimacy, thrill seeking, control, power, stress reduction, etc. This holds true for



not only a broad sample of diverse participants but also more specific samples based on gender/sex and sexual orientation/identity.

There were several limitations to our study. First, the DESQ format assesses how an individual's desire is generally characterized, i.e., sexual desire may be characterized by all DESO items, generally, or sexual desire may be characterized more specifically by some items than others, generally. Thus, when given as a general questionnaire, the DESQ measures general patterns of multifaceted sexual desire. However, context is undoubtedly important for experiences of sexual desire, and context may influence how multiple facets of sexual desire are experienced individually or simultaneously. And, it could be the case that people do not have general tendencies for how their sexual desire is characterized; multifaceted desire might be entirely contextual or vice versa. Future research might assess how scores on the DESQ factors differ within individuals depending on context, comparing general tendencies versus contextual patterns. For example, an individual might generally score high on Intimacy as characteristic of their sexual desire, but find that their sexual desire is characterized more highly by eroticism and/or thrill seeking when presented with a novel sexual partner.

Second, the DESQ factors showed some convergence with measures assessing sexual motives, such as the Sexual Motives Questionnaire (Hill & Preston, 1996) and the YSEX (Meston & Buss, 2007), calling to question the relationship between sexual motives and sexual desire. Conceptually, sexual motives and multifaceted sexual desire seem very different; the former is defined as stable interests in particular aspects of sexual behavior, and the latter characterizes a transient feeling of wanting to engage in a sexual experience (Hill & Preston, 1996). A priori, we agreed with Hill and Preston's assertion that sexual motives activate or initiate sexual feelings that contribute to sexual desire, but that sexual motives and sexual desire are separate concepts. Our results indicate that these concepts may overlap more than we predicted. For example, the Sexual Motives Questionnaire factors of emotional value for one's partner, relief from stress, enhancement of power, nurturance, and pleasure arguably parallel our own factors of Partner Focus, Stress Relief/ Relaxation, Power/Control, Intimacy, and Eroticism. Similarly, the YSEX presents a number of subfactor that align with DESQ factor themes. Such parallels make sense when considering sexual motives and sexual desires that are aligned. For example, someone who cites "I wanted to express my love for the person" as a reason for engaging in sexual activity (Meston & Buss, 2007) may similarly describe their sexual desire as being characterized by Intimacy. However, although sexual motives and sexual desire may often overlap, the possibility for divergences between sexual motives and sexual desire supports the necessity of their continued conceptual separation. For example, an individual may cite reasons for having engaged in sexual activity as "the person had taken me out for an expensive dinner" or "I felt obligated to" (Meston & Buss, 2007) despite having felt no sexual desire at all, emphasizing that sexual desire does not necessarily need to be present to motivate sexual behavior. Thus, although our data provide evidence for an overlap between sexual motives and sexual desire, it is the aim of the DESQ to measure multifaceted sexual desire as its own construct.

Third, there were limitations with the samples used in our study. For instance, the sample size for each EFA by gender/sex and sexual orientation/identity is considered small by statistical convention; thus, the EFAs for subgroups may have been less stable relative to an EFA with the entire sample. Communalities indicated that EFA was appropriate for subgroup assessments, but future research might replicate subgroup findings using larger sample sizes.

Additionally, the sample for the current study consisted primarily of young individuals in their twenties. This may account for the higher strength of certain characterizations of desire over others. For example, in the current study, participants did not score highly on a desire to reproduce, which may, in an older sample, be more important. Age is likely to be an important individual difference variable for understanding various facets of sexual desire. And, there are also a number of social location variables along which our participants were not diverse, including, but not limited to, race/ethnicity, trans/cis status, and sexual orientation/identity. The current sample included a Caucasian/white majority, was primarily cis-gendered, and included more heterosexual individuals than all non-heterosexual individuals combined. As our results show that multifaceted sexual desire is indeed socially contextualized, it would be important to consider how individuals not characteristic of our sample might experience sexual desire. For example, race-based stereotypes and experiences likely influence how multifaceted sexual desire is constructed for individuals of minority versus majority racial and ethnic backgrounds, yet we were unable to assess these social locations in our sample. Additionally, although non-cis-gendered individuals were included in the broad sample assessments, we were unable to run a separate EFA because of small sample size; thus, it remains to be understood how multifaceted sexual desire may be constructed differently in this social location compared to the broad sample and other groups. Furthermore, we made the decision to group non-heterosexual individuals together for analytic purposes, despite the possibility of alternative constructions of sexual desire within sexual orientation/ identity minorities; i.e., people of various non-heterosexual identities and orientations may not experience sexual desire in the same way (van Anders, 2012a). Although it would be difficult for one study to collect enough data to compare groups on all combinations of social location, our results lay a foundation for future questions concerning the contextualization of multifaceted sexual desire. In particular, our results emphasize how paying attention to social location is important when thinking about generalizability: Rather than assuming that there is a general pattern of DESQ factors that characterize sexual desire, it makes more sense to work on the assumption that people experience sexual desire in ways that are socially contextualized. Future work that takes social location more explicitly into account will help to clarify this point. In general, however, our work clearly shows that conceptualizations of sexual



desire as multifaceted reflect how sexual desire is actually experienced.

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#### **Compliance with Ethical Standards**

**Conflicts of interest** The authors declare that they have no conflict of interest.

**Research Involving Human Participants** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

# Appendix: Sexual Desire Questionnaire (DESQ)

#### **Instructions:**

For each question, rank your agreement with the following: When you have experienced sexual desire for a partner, is it generally characterized by a desire to...?

	1 Strongly disagree	2	3	4 Neither agree nor disagree	5	6	7 Strongly agree
1. Experience orgasm	1	2	3	4	5	6	7
2. Give your partner physical pleasure	1	2	3	4	5	6	7
3. Feel wanted/desired	1	2	3	4	5	6	7
4. Be touched	1	2	3	4	5	6	7
5. Have a thrill	1	2	3	4	5	6	7
6. Make your partner feel happy	1	2	3	4	5	6	7
7. Feel dominant/ powerful	1	2	3	4	5	6	7
8. Experience specific sexual activities	1	2	3	4	5	6	7
9. Feel protected	1	2	3	4	5	6	7
10. Try something new	1	2	3	4	5	6	7
11. Experience companionship	1	2	3	4	5	6	7

	1 Strongly disagree	2	3	4Neither agree nor disagree	5	6	7 Strongly agree
12. Feel irresistible	1	2	3	4	5	6	7
13. Relieve stress	1	2	3	4	5	6	7
14. Do something exciting	1	2	3	4	5	6	7
15. Express love for your partner	1	2	3	4	5	6	7
16. Surprise your partner	1	2	3	4	5	6	7
17. Be distracted from some other anxiety-provoking issue	1	2	3	4	5	6	7
18. Act out a sexual fantasy	1	2	3	4	5	6	7
19. Fall asleep	1	2	3	4	5	6	7
20. Alleviate boredom	1	2	3	4	5	6	7
21. Be dominated	1	2	3	4	5	6	7
22. Please your partner	1	2	3	4	5	6	7
23. Impress your partner	1	2	3	4	5	6	7
24. Feel happy	1	2	3	4	5	6	7
25. Make your partner feel emotionally closer to you	1	2	3	4	5	6	7
26. Make your partner feel wanted/desired	1	2	3	4	5	6	7
27. Feel sexually excited or aroused	1	2	3	4	5	6	7
28. Fantasize	1	2	3	4	5	6	7
29. Make your partner feel more secure about your relationship with him/her	1	2	3	4	5	6	7
30. Feel sexually satisfied	1	2	3	4	5	6	7
31. Feel a sense of commitment from your partner	1	2	3	4	5	6	7
32. Be physically close to your partner in a sexual way	1	2	3	4	5	6	7
33. Experience Power/ Control	1	2	3	4	5	6	7
34. End craving	1	2	3	4	5	6	7
35. Reconcile with your partner/end a fight	1	2	3	4	5	6	7
36. Feel sexy	1	2	3	4	5	6	7
37. Experience intimacy	1	2	3	4	5	6	7
38. Feel independent and in control of your body	1	2	3	4	5	6	7
39. Show your partner that you care	1	2	3	4	5	6	7
40. Feel cared for	1	2	3	4	5	6	7
41. Be protective	1	2	3	4	5	6	7
42. Touch your partner's body	1	2	3	4	5	6	7
43. Reproduce	1	2	3	4	5	6	7



	1 Strongly disagree	2	3	4Neither agree nor disagree	5	6	7 Strongly agree
44. Feel special	1	2	3	4	5	6	7
45. View erotic films or read an erotic story	1	2	3	4	5	6	7
46. Feel in control of your relationship	1	2	3	4	5	6	7
47. Initiate or maintain a romantic relationship	1	2	3	4	5	6	7
48. Feel loved	1	2	3	4	5	6	7
49. Experience romance	1	2	3	4	5	6	7
50. Feel emotionally closer to your partner	1	2	3	4	5	6	7
51. Make your partner feel that you are committed	1	2	3	4	5	6	7
52. Cuddle with your partner	1	2	3	4	5	6	7
53. See your partner naked	1	2	3	4	5	6	7
54. Boost your self- esteem or feel good about yourself	1	2	3	4	5	6	7
55. Feel more secure about your relationship with your partner	1	2	3	4	5	6	7
56. Relieve tension/ frustration	1	2	3	4	5	6	7
57. Experience desire for its own sake/no goal	1	2	3	4	5	6	7
58. Make your partner feel that you are supportive of him/her	1	2	3	4	5	6	7
59. Make yourself feel good	1	2	3	4	5	6	7
60. Avoid conflict with your partner	1	2	3	4	5	6	7
61. Make your partner feel special	1	2	3	4	5	6	7
62. Feel a sense of support from your partner	1	2	3	4	5	6	7
63. Experience physical pleasure	1	2	3	4	5	6	7
64. Grow closer to your partner or develop a stronger connection with him/her	1	2	3	4	5	6	7
65. Experience relaxation	1	2	3	4	5	6	7

66. Can you please identify who you imagined? You do not need to give a specific name; please provide your relation to this person (e.g., relationship partner, famous person, friend, etc.).

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