

# The Development and Validation of a Brief Quality of Sexual Experience (QSE) Scale: Results from a Nationally Representative Sample of Men and Women in the United States

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## ABSTRACT

**Introduction.** Much scientific research focuses on assessing and understanding individuals' perceptions of sexual pleasure, enjoyment and satisfaction. Many existing measures of pleasure and satisfaction provide valuable information but are limited in their ability to assess event-level quality.

**Aims.** To develop a scale for measuring the event-level quality of a sexual experience that could be used regardless of the age, gender, sexual orientation, and relationship status of the individual and across sexual activity types.

**Methods.** Interviews about the measurement of sexual quality and pleasure were conducted with 15 experts in the field of sexual health and informed the development of an event-level scale to measure the quality of sexual experiences. Scale items were administered to a cross-sectional nationally representative probability survey of Americans ages 18 to 60.

**Main Outcome Measures.** Socio-demographic items; Quality of Sexual Experience (QSE) scale items; event-level items related to overall sexual quality ("Quality item"), comparison to other sexual events ("Comparison item"), and orgasm ("Orgasm item").

**Results.** QSE scores were significantly correlated with responses to the Quality Item ( $r = 0.901$ ,  $P < 0.001$  for both women and men). Better experiences were associated with significantly higher QSE scores than were worse experiences; significant linear relationships were found for both women (GLM  $F[4,1461] = 129.46$ ,  $P < 0.001$ ) and men (GLM  $F[4,864] = 71.84$ ,  $P < 0.001$ ). QSE scores were significantly related to responses on the Orgasm Item for women [ $F[3,1430] = 246.53$ ,  $P < 0.001$ ] and men [ $F[3,858] = 117.24$ ,  $P < 0.001$ ].

**Conclusions.** The QSE scale is a valid and reliable event-level measure of the quality of a sexual experience in both women and men with outstanding psychometric properties. Clinical and research implications are discussed.

**Sanders SA, Herbenick D, Reece M, Schick V, Mullinax M, Dodge B, and Fortenberry JD. The development and validation of a brief quality of sexual experience (QSE) scale: Results from a nationally representative sample of men and women in the United States. J Sex Med 2013;10:2409–2417.**

**Key Words.** Quality of Sexual Experience; Sexual Function; Sexual Pleasure

## Introduction

Much scientific research focuses on assessing and understanding individuals' subjective perceptions of sexual pleasure, enjoyment, and satisfaction. Research demonstrates that sexual pleasure is a principal motivator for sexual behavior

[1–3]; that relationship satisfaction and sexual satisfaction are linked [4,5]; and that sexual well-being indicators may be associated with other classic measures of sexual health [6–8]. At a rapidly increasing rate, measures of sexual satisfaction are being linked to clinical interventions and research [9] and thus it is increasingly important that

reliable and valid measures of these complex constructs are in use. Additionally, there has been increased recognition of sexuality as a part of overall health and wellness and as important in its own right [7,10], with sexual pleasure being included in some conceptualizations of sexual health [11].

However, sexual pleasure and satisfaction are only some aspects of what makes sex “good,” valuable or meaningful to people [12]. Also, individuals vary considerably in how they interpret a sexual event as “pleasurable,” for example, a pleasurable experience may be defined by one person as whether they experienced orgasm and by another person as whether they experienced pain.

Research on the overall quality of sexual experience (QSE) remains limited in several ways. Most measures of sexual satisfaction are limited to use among heterosexual groups [9] with a review of 62 scales of sexual function finding that only 28% were appropriate for use among homosexual respondents, and only 52% were applicable to both genders [13]. A commonly used scale for assessment of heterosexual relationships is the Interpersonal Exchange Model of Sexual Satisfaction (IEMSS) [14]. Specifically, the IEMSS assesses sexual satisfaction as related to levels of rewards and costs in a sexual relationship [15,16].

Research oftentimes defines measures of sexual pleasure within one or two measurements, such as a Likert scale of “sexual satisfaction” [17,18]. The Sexual Activity Questionnaire (SAQ), commonly used in research, has 10 Likert scale questions about habits, pleasure, and discomfort.

Further, a number of measures ask an individual to assess their sexual life as a whole or over a period of time, such as over the previous 4 weeks, which limits our understanding of how the quality of an individual sexual experience may be shaped by relational, interpersonal, situational, mood or hormonal factors, or the use of medications, sexual enhancement products (e.g., vibrators, lubricant), or safer sex products (e.g., condoms, contraceptives). Event-level prospective daily diary research has demonstrated that sexual experiences, including individuals’ ratings of sexual pleasure and satisfaction, vary within-person—even across events with the same partner—and are shaped by situational, relational, and interpersonal factors [19–22].

Having a reliable and valid event-level measure of sexual quality would enhance researchers’ abilities to better assess the factors that contribute to an individual or couple’s sexual experience. Single-

item measures of pleasure and satisfaction provide valuable information but are limited in their ability to assess the quality of a given sexual event. They do not, for example, capture the presence or absence of orgasm (which many women and men report as being important to, but not representative of, their sexual satisfaction) nor do they assess psychological or physiological aspects of sexual experiences, which are often neglected in studies of sexual satisfaction [23].

## Aims

The primary aim of this study was to develop a scale for measuring the quality of a sexual experience on an event-specific basis. We sought to create a measure that could be used without privileging the age, gender, sexual orientation, and relationship status of the individual, the gender of individuals’ partner(s), or the type of sexual activity involved. Study protocols received institutional review board approval at the authors’ institution.

## Methods

This study was carried out in two phases. During Phase One, we conducted semi-structured interviews to inform item development for an event-level measure of sexual quality. During Phase Two, we included those items in a cross-sectional nationally representative probability survey of Americans ages 18 to 60, the 2008 US National Survey of Sexual Pleasure and Vibrator Use (NSSPV). We then conducted the principal component analysis and created scale scores. For validity testing, scale scores for the quality of sexual experience were compared to answers on other questions that should reflect quality aspects of the same experience. Specifically, the following hypotheses were tested: (i) There will be a significant positive relationship between QSE scores and ratings on an item assessing quality of the experience at last sexual event (Quality Item); (ii) There will be a significant positive relationship between QSE scores and ratings on an item comparing this most recent sexual event to previous sexual experiences (Comparison Item); (iii) There will be a significant positive relationship between QSE scores and ratings on related to orgasm (Orgasm Item); and (iv) QSE scores will be a better predictor of sexual quality and sexual comparison than scores on the CDC health-related quality of life (HRQoL) measure.

### **Phase One: Development of the QSE Scale Methods**

*Participants and Procedure.* In 2008, the first and second author invited a total of 16 professionals with sexuality-related expertise to participate in confidential semi-structured interviews about measuring sexual pleasure and quality. A total of 15 professionals (male and female) working in the field of sexuality in four countries agreed to be interviewed. At the time of the study, these sexuality professionals were working as psychologists, medical doctors, sexuality educators, sex therapists, and researchers who study sexuality topics. Participants were read a statement of informed consent and indicated their consent verbally. Interviews were semi-structured, occurred via telephone, typically lasted between 30 and 60 minutes, and were audio-recorded and transcribed. Participants were given a \$150 gift card as an incentive for participation.

### **Measures**

Participants were asked a series of open-ended questions. They were asked to describe what they felt would be important dimensions to assess in a QSE measure; how each dimensions would be assessed; how the pleasure of a sexual experience might be assessed; the importance of lifespan, developmental stage, sexual history, gender, and sexual orientation in relation to measuring the identified dimensions of sexual quality and pleasure; and how these dimensions related to partnered vs. solo experiences, relationship contexts, and cultural/subcultural differences.

### **Data Review and Item Development**

The first, second, third, and sixth author reviewed the transcripts for information that would be complementary to, or that would challenge, their existing ideas and the scientific literature related to sexual pleasure and quality. Data from the transcripts informed the authors' conceptualization of scale constructs and items. Based on these interviews, a main principle for developing QSE items was identified: QSE items needed to be general assessments using broadly evaluative terms rather than items referring to particular aspects of physical or emotional experience. There were two main reasons for this: (i) What makes a sexual event pleasurable or high quality is (a) highly variable across people; and (b) highly variable across events even for a single individual; and (ii) Pleasure and quality ratings: (a) depend on the expectation the individual had for that event and whether those

expectations were met; and (b) that expectations vary highly across both individuals and events. Based on the specific recommendations for items and wording provided in these interviews and using the main principle of general assessment described above, the initial eight items of the QSE were written.

### **Phase Two: Administration and Testing of the QSE Scale**

#### **Participants**

Data for this study were drawn from a larger, cross-sectional and nationally representative probability survey of the U.S. population aged 18–60 years that included 2,056 women and 1,047 men [24,25]. Only those who reported that their most recent sexual activity occurred in the past 4 weeks (1,474 women, 877 men) were included in these analyses regardless of whether they had engaged in partnered sexual activity or solo masturbation and whether or not a vibrator was used.

Data were collected through Knowledge Networks, which has existing research panels established using address-based sampling. These methods provide a non-zero probability selection of U.S. households with a telephone that is statistically adjusted monthly based on updates from the U.S. Census Bureau. All data were collected by Knowledge Networks via the Internet. Knowledge Networks provides panel member with access to the Internet and hardware if needed. Researchers have used Knowledge Networks for multiple health-related studies, substantiating the validity of such methods for obtaining data from nationally representative samples of the U.S. population [24–29].

#### **Main Outcome Measures**

*QSE Items.* QSE items were administered in the nationally representative sample of men and women aged 18–60 in the United States. In its initial implementation, the QSE had eight bipolar items with a 7-point rating scale (see Table 3).

*Validation Questions.* Three single-item questions were used as validation questions for the QSE Scale. A semantic differential item (“the Quality Item”) assessed participants’ judgment of the overall quality of the sexual experience (“Thinking about the last sexual experience that you just described, would you say that it: High quality 1 2 3 4 5 6 7 Low Quality”). Participants were also asked a “Comparison Item” (“Thinking about the

last sexual experience that you just described, compared to your typical sexual experience in the past 4 weeks, was this experience . . .”; response options: “1 = Much Better, 2 = Better, 3 = About the same, 4 = Worse, 5 = Much Worse”). They were also asked an “Orgasm Item” (“Thinking about the last sexual experience that you just described, during this sexual experience, did you have an orgasm?” with response options: “1 = Yes, and it was better than usual, 2 = Yes, and it was about the same as usual, 3 = Yes, but it was not a good as usual, 4 = No, 5 = Not sure”).

### Procedures

**Data Collection.** Only those who reported that their most recent sexual activity (partnered or solo masturbation) occurred in the past 4 weeks were included in these analyses. In addition to the QSE and validation items described above, participants answered a comprehensive range of items related to sociodemographics, the 4-item CDC HRQoL measure, sexual behaviors including vibrator use, and sexual function. Sociodemographic variables reported here include age, gender, race, Hispanic ethnicity, education, sexual orientation, marital status, and recent sexual history.

### Data Analyses

Analyses were conducted separately for women and men. All items except for the one about duration of sex were reversed coded so that higher quality was associated with higher scores. QSE items were entered into a principal components factor analysis with varimax rotation. KMO and Bartlett’s tests were used to assure appropriateness of the procedure. Cronbach’s alphas were used to measure scale reliability. Descriptive statistics are reported for all single item questions and the QSE scale scores for women and men. Post-stratification data weights (including distributions for age, race, Hispanic ethnicity, education, and U.S. census region) were applied to reduce variance and minimize bias due to nonsampling error. Descriptive statistics were used to report sample characteristics. Correlational analyses were used to test hypothesis 1. General Linear Model (GLM) analyses were used to test hypothesis with Fisher’s Least Square Difference post-hoc analyses 2. Analyses of variance were used to test hypothesis 3. *t*-tests were used for group comparisons for hypotheses 4 and 5. IBM SPSS Statistics version 19 (IBM Corporation, Armonk, NY, USA) was used for analyses.

## Results

### Sample Description

Table 1 presents detailed demographic information on the sample. Participants ranged in age from 18 to 60 with female participants reporting a mean age of 39.09 (SD = 11.59, MDN = 38.17) and male participants reporting a mean age of 40 (SD = 11.93, MDN = 40). The majority of the participants indicated that they were white, non-Hispanic with a sizable minority of participants indicating that they were black, non-Hispanic or Hispanic (represented in Table 1). The majority of the participants self-identified as heterosexual with close to half of the participants reporting being currently married.

### Item Analysis

As can be seen, in Table 2, the distributions for each item were generally similar for men and women. Except for the item on duration, the

**Table 1** Weighted participant characteristics by gender

Sample characteristics	Men (n = 847) % n	Women (1,437) % n
Age		
18–24	13.34 (113)	9.65 (139)
25–34	20.23 (171)	30.46 (438)
35–44	29.28 (248)	25.53 (367)
45–54	23.03 (195)	21.98 (316)
55–64	14.12 (120)	12.37 (178)
Ethnicity		
White, non-Hispanic	70.82 (600)	69.46 (998)
Black, non-Hispanic	9.63 (82)	12.11 (174)
Other, non-Hispanic	4.89 (41)	5.72 (82)
Hispanic	13.53 (115)	11.53 (166)
2+ Races, non-Hispanic	1.14 (10)	1.19 (17)
Education		
Less than High School	11.41 (97)	8.89 (128)
High School Graduate	30.52 (258)	26.15 (376)
Some College	26.72 (226)	32.68 (470)
Bachelors Degree or Higher	31.34 (265)	32.28 (464)
Sexual orientation		
Heterosexual	94.27 (794)	93.27 (1,338)
Homosexual	3.47 (29)	1.68 (24)
Asexual	1.48 (13)	4.20 (60)
Other	0.77 (7)	0.85 (12)
Marital status		
Married	47.85 (405)	54.62 (785)
Widowed	1.06 (9)	1.11 (16)
Divorced	12.19 (103)	8.54 (123)
Separated	1.81 (15)	2.08 (30)
Never married	27.39 (232)	22.00 (316)
Living with partner	9.70 (82)	11.64 (167)
Recent (4 weeks) sexual partner history		
Not been sexually active with any other person	23.82 (202)	20.24 (291)
Sexually active with only one person	71.64 (607)	75.87 (1,090)
Sexually active with more than one person	4.53 (38)	3.89 (56)



**Table 2** Weighted descriptive statistics for quality of sexual experience (QSE) items and scale scores for women and men

QSE Items	Women			Men		
	n	Mean (SD)	Median	n	Mean (SD)	Median
Was very bad—was very good*	1,428	5.85 (1.24)	6.00	845	5.72 (1.29)	6.00
Was not at all what I wanted it to be—was very much what I wanted it to be*	1,423	5.55 (1.52)	6.00	844	5.36 (1.55)	6.00
Didn't meet my expectations at all—exceeded my expectation*	1,430	5.07 (1.39)	5.00	844	4.97 (1.41)	5.00
Was not at all pleasurable—was very pleasurable*	1,430	5.79 (1.38)	6.00	844	5.79 (1.30)	6.00
Was sex that I was not into at all—was sex that I was totally into*	1,428	5.39 (1.54)	6.00	838	5.41 (1.50)	6.00
Very bad physically—very good physically*	1,431	5.58 (1.39)	6.00	844	5.57 (1.43)	6.00
Very bad emotionally—very good emotionally*	1,433	5.47 (1.49)	6.00	842	5.48 (1.51)	6.00
QSE scale score†	1,436	5.53 (1.27)	5.86	845	5.47 (1.26)	5.71

\*Items as presented here are in the recoded form with higher quality having higher scores

†The QSE Scale Score is the mean of the first seven QSE Items listed above. The duration item did not load on the factor and was omitted from the QSE Scale.

distributions for the QSE items were negatively skewed with approximately half of the participants scoring at the high end of the scales and approximately a quarter scoring at the low end of the scales (presented in Table 3). The same was true for the Quality Item.

### QSE Scale Construction

A principal components analysis conducted separately on data from women and men revealed a single factor that included all items except the item about the duration of sexual activity. The factor accounted for 79.90% of the variance among women and 78.29% of the variance among men. For women, item loadings ranged from 0.82 to 0.93. For men, item loading ranged from 0.85 to 0.92. Cronbach's Alpha was 0.95 for men and 0.96

for women with split-half reliabilities at or above 0.85. Thus, an excellent factor structure with excellent reliability was found.

QSE Scores were generated for each individual by taking a mean of their answers to the seven questions that were reverse coded so that higher scores indicate a higher quality experience. As can be seen in Table 2, the distributions of QSE scores were similar for women and men.

### Preliminary Validation of the QSE Scale

#### Hypothesis 1 was Confirmed

QSE scores were significantly correlated with responses to the Quality Item ( $r = 0.90$ ,  $P < 0.001$  for both women and men). Quality Item scores were also similar for women ( $M$  [SD] = 5.38 [1.48]) and men ( $M$  [SD] = 5.47 [1.26]).

**Table 3** Weighted frequency of participant responses to QSE items by gender

Thinking about the last sexual experience that you just described, would you say that it:	1	2	3	4	5	6	7	
% of the participants who indicated the response								
<b>Men (n = 845)</b>								
Was very good	36.4	25.2	19.3	14.0	3.7	0.7	0.7	Was very bad
Was very much what I wanted it to be	28.0	26.7	19.5	14.0	5.9	2.8	3.2	Was not at all what I wanted it to be
Exceeded my expectations	14.5	23.4	26.6	24.2	5.6	2.8	2.9	Didn't meet my expectations at all
Was very pleasurable	40.6	22.5	18.8	13.0	3.2	1.6	0.3	Was not at all pleasurable
Was sex that I was totally into	32.1	20.9	19.0	17.4	7.1	1.6	1.9	Was sex that I was not into at all
Didn't last long enough*	14.9	12.8	19.7	35.8	8.9	5.3	2.5	Lasted longer than I wanted
Very good physically	34.7	22.9	18.2	18.1	2.5	1.5	2.0	Very bad physically
Very good emotionally	35.4	20.4	15.4	20.4	4.3	2.0	2.0	Very bad emotionally
<b>Women (n = 1,428)</b>								
Was very good	41.0	25.1	16.9	12.8	3.2	0.7	0.2	Was very bad
Was very much what I wanted it to be	35.3	24.6	17.2	12.3	5.9	2.5	2.2	Was not at all what I wanted it to be
Exceeded my expectations	15.4	25.8	27.5	20.1	6.1	2.6	2.4	Didn't meet my expectations at all
Was very pleasurable	41.1	25.1	17.3	9.6	3.6	2.1	1.2	Was not at all pleasurable
Was sex that I was totally into	31.9	22.7	17.0	17.3	5.5	3.7	1.9	Was sex that I was not into at all
Didn't last long enough*	13.3	11.9	12.7	40.2	12.0	5.6	4.3	Lasted longer than I wanted
Very good physically	32.9	26.2	18.3	16.0	3.1	2.2	1.3	Very bad physically
Very good emotionally	33.2	22.9	18.2	15.5	6.1	2.3	1.9	Very bad emotionally

\*Note. This item was removed from overall scale score.

### Hypothesis 2 was Confirmed

Better experiences were associated with significantly higher QSE scores than were worse experiences. Significant linear relationships were found for both women ( $F[4,1459] = 148.39$ ,  $P < 0.001$ ) and men ( $F[4,807] = 97.43$ ,  $P < 0.001$ ). For women, each step is significantly different from the previous one (all  $P < 0.001$ ) with the mean (SD) for Much Worse, Worse, About the Same, Better, Much Better, respectively: 2.69 (0.25); 4.29 (0.09); 5.39 (0.04); 6.17 (0.06); 6.64 (0.09). For men, the mean (SD) for Much Worse, Worse, About the Same, Better, Much Better as follows: 2.29 (0.33); 4.06 (1.13); 5.38 (0.04); 6.24 (0.10); 6.67 (0.12). For men, each step was significantly different from the previous one. The step between Better and Much Better was significant at  $P = 0.005$ , with all other post hoc comparisons (assessed using Fisher's Least Square Difference) attaining  $P < 0.001$ .

### Hypothesis 3 was Confirmed

QSE scores were significantly related to responses on the Orgasm Item for both women ( $F[3, 1382] = 240.38$ ,  $P < 0.001$ ) and men ( $F[3,823] = 133.79$ ,  $P < 0.001$ ). Answers to the Orgasm Item were as follows: 15.9% of women and 15.0% of men indicated that their orgasm was better than usual; 53.9% of women and 67.6% of men it was about the same as usual; 11.5% of women and 10.3% of men indicated that it was not as good as usual; 15.6% of women and 5.4% of men indicated that they did not have an orgasm; and 3.1% of women

and 1.7% of men indicated that they were not sure if they had an orgasm. "Not sure" was treated as missing data for these analyses. Fisher's Least Square Difference was used to conduct post hoc analyses. For women, all four groups were significantly different from each other ( $P < 0.001$ ). QSE scores were highest for those whose orgasms were better than usual ( $M$  [SD] = 6.56 [0.71]), followed by those whose orgasms were about the same as usual ( $M$  [SD] = 5.80 [0.94]), followed by those whose orgasms were not as good as usual ( $M$  [SD] = 4.69 [1.13]), with the lowest scores for those reporting no orgasm ( $M$  [SD] = 4.29 [1.42]). For men, the pattern was a bit different. These last two groups had the lowest QSE scores, but they were not significantly different from one another ( $P = 0.38$ ; not as good as usual  $M$  [SD] = 4.15 [1.00]; no orgasm  $M$  [SD] = 3.98 [1.50]). Men experiencing an orgasm that was better than usual had QSE scores significantly higher than all other groups ( $P < 0.001$ ;  $M$  [SD] = 6.64 [0.58]). Men reporting their orgasm was about the same as usual had the second-highest QSE scores, which were significantly higher than the two groups below them and significantly lower than the highest group ( $P < 0.001$ ;  $M$  [SD] = 6.64 [0.59]). In addition to establishing convergent validity, we assessed the relationship between QSE scores, scores on the CDC HRQoL measure, and a single sexual quality and comparison item. As represented in Table 4, while QSE scores predicted close to 90% of the variance in the sexual quality item and over 50% of the variance in the sexual comparison item, scores on the CDC HRQoL

**Table 4** Weighted intercorrelations amongst QSE scores, health and validation items

Item	QSE score	General health	Physical health	Mental health	Impaired days	Sexual quality item	Sexual comparison item
<b>Men</b>							
QSE score	—	−0.155**	−0.013	−0.108**	0.057	0.887**	0.534**
General health	—	—	0.341**	0.222**	0.270**	−0.147**	−0.096**
Physical health	—	—	—	0.401**	0.573**	−0.015	0.049
Mental health	—	—	—	—	0.412**	−0.153**	−0.015
Impaired days	—	—	—	—	—	0.016	0.156**
Sexual quality item	—	—	—	—	—	—	0.500**
Sexual comparison item	—	—	—	—	—	—	—
<b>Women</b>							
QSE score	—	−0.161**	−0.076**	−0.092**	−0.094**	0.904**	0.519**
General health	—	—	0.411**	0.310**	0.364**	−0.169**	−0.089**
Physical health	—	—	—	0.407**	0.512**	−0.093**	0.014
Mental health	—	—	—	—	0.375**	−0.069**	−0.022
Impaired days	—	—	—	—	—	−0.088**	−0.035
Sexual quality item	—	—	—	—	—	—	0.498**
Sexual comparison item	—	—	—	—	—	—	—

Note. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$

measure predicted less than 20%. Thus, indicating that QSE scores are a better measure or the construct than scores on the CDC HRQoL measure.

## Discussion

These findings suggest that the QSE score is a valid and reliable event-level measure of the quality of a sexual experience in both women and men with outstanding psychometric properties. The 7-item QSE Scale has excellent internal consistency with alpha at 0.96 and split-half reliabilities at 0.89 or higher. While the high internal consistency may indicate that all items are assessing one construct, it may also indicate that there is statistical or conceptual redundancy amongst the items. It is, therefore, possible that a more parsimonious scale may be acceptable although the individual items may have particular value for clinicians or researchers who wish to collect information about specific aspects of individuals' sexual experiences (e.g., being good physically vs. emotionally) rather than solely a total score. Future researchers should investigate this possibility as well as when and for whom scale items are inter-correlated and when they are not (e.g., are there certain individuals, or certain experiences, in which high quality sex is often rated as "good physically" but not "good emotionally" or vice versa?)

The QSE discriminates between other ratings of the quality of the sexual experience and the experience and quality ratings of orgasm across individuals. Specifically supporting validity, five hypotheses were confirmed: (i) There was a significant positive relationship between QSE scores and ratings on the Quality Item (asking for the event to be rated from low quality to high quality). (ii) There was a significant positive relationship between QSE scores and ratings on the Comparison Item (indicating whether the sexual event was much worse to much better than usual). (iii) There was a significant positive relationship between ratings on the Orgasm Item (indicating the presence and quality of the orgasm at last event). There was also a significant negative relationship between scores on the CDC HRQoL measure and the QSE score. However, scores on the CDC HRQoL measure did not predict more than 20% of the variance in the QSE score, indicating that they were unique constructs. Thus, the QSE appears to be a valid measure of the quality of a sexual experience.

A strength of the study is the use of a nationally representative probability sample. However, it is important to note that the sample was limited to

U.S. men and women aged 18–60. As sexual dysfunction is more prevalent in older individuals, not having data from those 60 and older may have biased the sample toward those with better sexual functioning. Additionally, we cannot be certain about the generalizability to other countries. It is also important to remember that the cross-sectional design focusing on the last sexual event within the past 4 weeks means that all comparisons were between-subjects and not within-subject comparisons. Therefore, it is not possible to determine whether higher QSE scores reflect experiential differences or individual differences in sexual experience. Studies using the QSE Scale with designs permitting within-subject comparisons across sexual events would strengthen the validation of this instrument. With the current data, it is not possible to determine whether QSE scores will vary within individuals having different quality experiences on different occasions, although the ratings comparing the reported experience to typical experiences suggest that it will.

In this national probability sample of U.S. adults aged 18–60, women and men had similar scores on the QSE with the mean around 5.5, toward the higher quality end, of the 1 to 7 point scale. It is important to note that the full range of scores from 1 to 7 was found among both women and men. It is not surprising that most people who are engaging in sexual behavior rate their experiences positively in terms of quality and pleasure. In clinical samples, the distribution of scores might be centralized. The scale would benefit from further validation with clinical populations in future research.

The QSE was not developed for clinical diagnostic purposes, although future investigations may show that it has use as a clinical tool. There are other tools more suited for diagnosing sexual functioning. The purpose of the QSE is to measure QSE *on an event-specific basis*. This research tool can then be employed to assess any number of variables that might affect the QSE from one event to another. Clinical diagnoses would not be based on single event assessment. Although future work with the QSE could examine its relationship to subject variables (e.g., sexual functioning, marital status and partner type, sexual orientation, ethnicity), it was specifically designed to assess event-specific variables (e.g., product use, particular behaviors, partner type, setting).

The QSE enriches the options for assessment of QSE, with the unique strength of focusing on

event-level data. For those wishing to use the QSE in their work we have the following suggestions. Given the desire to have higher QSE scores reflect a higher quality of experiences, we recoded the item scores so that more positive responses receive the higher scores. We recommend that in future use of the QSE, the items be presented with the more positive anchor and the score of 7 on the right and the more negative anchor and the score of 1 on the left (e.g., Was Very Bad 1 2 3 4 5 6 7 Was Very Good).

## Conclusion

The QSE appears to be a reliable and valid brief measure of the QSE. The QSE adds to available measures in that its items were designed to be used for event level assessment without privileging the gender, age, sexual orientation, and relationship status of the individual, the gender of individuals' partner(s), or the type of sexual activity involved.

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