

The Female Sexual Function Questionnaire (SFQ28)®

Background and Scoring

Background

The Female Sexual Function Questionnaire (SFQ) is a self-report outcomes measure of female sexual function which has been developed to be multi-dimensional and patient-centred.

The SFQ addresses all aspects of the sexual response cycle (desire, arousal, orgasm) as well as pain, which is in keeping with the DSM-IV diagnostic criteria and the newly generated AFUD definitions. The item content of the SFQ was generated from the aggregated responses of 82 women to a semi-structured interview. The content of the interview addressed, amongst other things, women's understanding of the terms commonly used to describe the phases of sexual response (e.g. desire and arousal) and the language that they themselves used to describe these changes. These interviews also addressed some of the consequences of female sexual dysfunction (FSD) for the woman, her partner and their relationship and some of these core issues are also represented within the SFQ item content.

Both the physical and the cognitive aspects of sexual response are evaluated within the SFQ items as these two elements were strongly identified as being important, both in relation to the impact of FSD and to changes in function, both positive and negative, in the interview sample of women. The item content of the SFQ has also been judged to be clinically relevant by an external panel of clinicians with expertise in Psychology, Physiology, Gynaecology, Physical Medicine and the treatment of FSD.

Subsequent use of the SFQ in clinical trials in a large sample of women (approx. 900) has demonstrated that it has excellent psychometric properties including discriminative and construct validity, test-retest reliability, internal consistency and sensitivity to change. This is the case at both the item level and the domain level (seven domains have been identified through factor analysis: Desire, Arousal (sensation), Arousal (lubrication), Orgasm, Pain, Enjoyment and Partner).

The validity of the SFQ at both the item level and the domain level supports the use of individual SFQ domains as primary endpoints (e.g. Arousal or Orgasm) with the remaining domains being utilised as secondary endpoints. This approach also ensures that all aspects of sexual function are evaluated in a therapeutic area in

which the effects of dysfunction and intervention are not currently wholly understood.

The development and validation of the SFQ has been published in *Journal of Women's Health and Gender-Based Medicine*¹.

The SFQ can also be used as a screening tool for women with sexual dysfunction, being able to detect both the presence of sexual dysfunction and the specific components of sexual function affected. Cut-scores for each domain have been generated based on data from clinical trials and population surveys, and have been published in the *Journal of Sexual Medicine*².

Confirmatory validation of the SFQ28 structure (given the removal of 6 redundant items and addition of the new Arousal-Cognitive domain) and cut-scores has been conducted, data is on file. Manuscripts are in preparation.

References:

1. Quirk FH, Heiman JR, Rosen RC, Laan E, Smith MD, Boolell MD. Development of the Sexual Function Questionnaire for Clinical Trials of Female Sexual Dysfunction. *Journal of Women's Health & Gender-based Medicine* 2002; 11: 277-289.
2. Quirk F, Haughie S, Symonds T. The use of the Sexual Functioning Questionnaire as a screening tool for women with sexual dysfunction. *Journal of Sexual Medicine* 2005; 4: 469-477.

SFQ Scoring System (Items, Total, Domains)

Individual Items

The SFQ28 contains 28 items and each item has between 5 or 7 possible response options.

Items 1-4, 25-26 are scored 1-5 (in ascending order)

e.g. 1. Over the last 4 weeks, how often have you had pleasurable thoughts and feelings about sexual activity?

Not at all	(1)
Rarely	(2)
Sometimes	(3)
Often	(4)
Very often	(5)

Items 27 - 28 are scored 5-1 (in descending order)

e.g. 27. Thinking about the last 4 weeks, how much did you worry that your partner may look for another sexual relationship because of problems with your sex life?

Not at all	(5)
Slightly	(4)
Moderately	(3)
Very	(2)
Extremely	(1)

Items 5-13, 15, 18-19, 21-22 are scored 1-5 (in ascending order) with the 'not applicable' category (e.g. 'I did not take part in sexual activity') **set to 'missing'**.

e.g. 5. Over the last 4 weeks, in general, how enjoyable has it been to be sensually touched and caressed by your partner?

I have not been touched or caressed (missing)

Not enjoyable	(1)
Slightly enjoyable	(2)
Moderately enjoyable	(3)
Very enjoyable	(4)
Extremely enjoyable	(5)

Item 14 is scored 1-6 (in ascending order) with the 'not applicable' category (e.g. 'I did not take part in sexual activity') **set to 'zero'**.

e.g. 14. Over the last 4 weeks, how often did you take part in sexual activity with penetration (e.g. vaginal penetration and intercourse)?

I did not take part in sexual activity	(0)
Once/twice	(1)
3-4 times	(2)
5-8 times	(3)
9-12 times	(4)
13-16 times	(5)
>16 times	(6)

Items 23-24 are scored 1-5 (in ascending order) with the 'not applicable' category (e.g. 'I did not have any orgasms') **set to 'zero'**.

e.g. 23. Over the last 4 weeks, in general, how pleasurable were the orgasms that you had?

I did not have any orgasms	(0)
Not pleasurable	(1)
Slightly pleasurable	(2)
Moderately pleasurable	(3)
Very pleasurable	(4)
Extremely pleasurable	(5)

Items 16-17 are scored 5-1 (in descending order) with the 'not applicable' category (e.g. 'I did not take part in sexual activity') **set to 'missing'**.

e.g. 16. Over the last 4 weeks, how often did you experience pain in your vagina/genital area during or after sexual activity (e.g. penetration, intercourse)?

Not at all	(5)
Sometimes	(4)
Often	(3)
Very often	(2)
Every time	(1)

Item 20 is scored from 5-1 (in descending order) with the 'I did not take part in sexual activity' scored as '**missing**' and the 'I did not take part in sexual activity *because* of being worried or anxious about pain' scored as '**zero**'.

e.g. 20. Over the last 4 weeks, how often have you been worried or anxious about pain during sexual activity?

I did not take part in sexual activity (missing)

I did not take part in sexual activity because of being worried or anxious about pain (0)

Not at all (5)

Sometimes (4)

Often (3)

Very often (2)

Every time (1)

Domain Scores

Eight domains have been identified:

Domain	# of items	Items	Raw Score range	*Scores suggesting normal function
Desire	6	1-4, 14, 26	5-31	≥23
Arousal (Sensation)	4	6-9	4-20	≥14
Arousal (Lubrication)	2	10-11	2-10	≥8
Arousal (Cognitive)	2	12-13	2-10	≥8**
Orgasm	3	22-24	1-15	≥12
Pain	3	16, 17, 20	2-15	≥12
Enjoyment	6	5, 15, 18, 19, 21, 25	6-30	≥23
Partner	2	27, 28	2-10	≥8

*These scores indicating a high likelihood of normal function have been derived using discriminant analyses from the current database and should be used as guidelines only. There is a band of score below these where functional status (excluding Partner domain) would be considered as borderline depending on other clinical indices. See Table 1.

Table 1. SFQ Score ranges indicative of likelihood of sexual dysfunction

Domain	Score range indicating high probability of FSD	Score range indicating borderline sexual function	Score range indicating high probability of normal sexual function
Desire	5-16	17-22	23-31
Arousal (S)	4-10	11-13	14-20
Arousal (L)	2-5	6-7	8-10
Arousal (C)**	2-5	6-7	8-10
Orgasm	1-8	9-11	12-15
Pain	2-8	9-11	12-15
Enjoyment	6-16	17-22	23-30

**Data regarding validation of this domain and its cut-score is available up on request. Manuscript is in preparation.

When used in conjunction with a clinical sexual history interview the SFQ scores should be supportive of information derived from the subject (i.e. if the subject proposes that orgasm is her greatest sexual complaint a score within the range of 3-11 would be expected. A score greater than 12 should prompt a review and further discussion).

Where discrepancies between the SFQ score and the sexual problem (s) derived from the sexual history interview arise the opportunity should be taken to discuss this further with the subject and determine the cause (s) for any discrepancy.

Missing items

Inevitably there will be occasions when not all questions for a particular domain have been answered, either by mistake or because the respondent was not prepared to answer a particular question. However, if 50% or more of the items have been answered then the score can still be calculated by imputing the average of the other respondents to the missing item. For example, if item 14 on the desire domain was missing then the average score for this item from the other respondents can be imputed.

Missing Questionnaires

If more than a baseline assessment has been made prior to end of treatment (EOT) then the last observation carried forward (LOCF) principle can be applied.