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Arabic Validation of the Pelvic Organ Prolapse/Incontinence Sexual Questionnaire, IUGA-Revised (PISQ-IR)

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Abstract

Introduction and Hypothesis—To translate then assess the validity of the culturally adapted “the Pelvic Organ Prolapse and Incontinence Sexual Function Questionnaire - IUGA Revised (PISQ-IR)” to assess sexual health among Arabic-speaking women with pelvic floor disorders".

Methods—PISQ-IR was modified to consider cultural characteristics of Middle East. Final validity and reliability study included 172 women with urinary (UI), and/or pelvic organ prolapse (POP). Participants completed the questionnaire twice: at enrollment and 2 weeks later.

Results—Among sexually active women, good internal consistency was observed for 5 of the 6 scales in the adapted instrument: global quality (Cronbach’s coefficient $\alpha = 0.86$), condition impact ($\alpha = 0.87$), desire ($\alpha = 0.82$), condition-specific ($\alpha = 0.74$), and partner-related ($\alpha = 0.75$). Internal consistency was acceptable for the Arousal Orgasm subscale ($\alpha = 0.66$). However, among not sexually-active women, internal consistency was poor ($\alpha < 0.6$) for all four scales relevant to them (global quality, condition-impact, condition-specific, partner-related).. Lin’s concordance

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- AS El-Azab: Data Collection, Manuscript writing, Study conception and Design
- GM Ghoniem, MD, FACS: Study conception and Design, Manuscript writing
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correlation coefficient measuring agreement between the test and retest measurements (CCC; a value of 1 represents perfect agreement) ranged from 0.81 to 0.87 for the not sexually active scales, except for condition impact (CCC=0.63.) For sexually active women, CCC was typically stronger, ranging from 0.85 to 0.96.

Conclusions—PISQ-IR is an easy to administer, reliable, and valid questionnaire to assess sexual function in sexually active Arabic women with POP, UI or FI, but internal consistency was poor for Arabic women not sexually active.

Keywords

Questionnaire; Quality of life; Prolapse; Sexual dysfunction; urinary incontinence; fecal incontinence

INTRODUCTION

The Middle Eastern community in general and the Egyptian culture specifically are known with their conservative attitude towards sexual issues, especially for women. Sexual education is not yet allowed in any form. Awareness of available methods for treatment of female sexual dysfunction (FSD) is limited. Availability of treatment for certain problems is still a challenge. There is considerable deficiency in the well-trained physicians with adequate knowledge to treat FSD. FSD seems to be a hidden but a major problem in the Middle East society and a study that included 1000 married women showed that the prevalence of FSD is high with prevalence approaching 70% among studied sample.[1] One study has estimated that the prevalence of urinary incontinence in Egypt to be as high as 55%.[2] Data on the prevalence of genital prolapse are limited. Pelvic organ prolapse (POP) in Egypt tends to occur at earlier ages due to high parity rate and early age at marriage.[3] Data suggest higher rates of sexual dysfunction among women with pelvic floor disorders, including POP and urinary incontinence.[4]

To be used in clinical or research practice, a questionnaire must demonstrate three important psychometric characters: validity, reliability, and responsiveness (change with treatment). A questionnaire that is valid and reliable for a particular language and culture may not prove so when used in a different population. Two important questionnaires have been introduced into clinical practice to evaluate female sexual dysfunction: the Female Sexual Function Index (FSFI), and the McCoy Female Sexuality Questionnaire (MFSQ). These 2 questionnaires are designed to evaluate sexual function in a general population and not specifically in women with pelvic floor disorders. Though they are simple, easy to understand, reliable and valid, they do not address the unique sexual problems associated with POP and how it affects the quality of life (QoL). The only condition-specific questionnaire to assess the sexual function in women with pelvic organ prolapse or urinary incontinence is the Pelvic Organ Prolapse and Incontinence Sexual Function Questionnaire (PISQ). The International Urogynecological Association (IUGA) Sexual Function Group revised and modified the original short version of the questionnaire PISQ-12 (PISQ-IR i.e. IUGA Revised) with the aim to develop a condition specific instrument intended for international use and to assess sexual function in women who are both sexually and not sexually active as well as women with anal incontinence. In addition, the PISQ-IR have been developed to evaluate women

without a partner or those who did not consider themselves to be sexually active. The PISQ-IR also assesses the impact of the partner on the sexual function.[7] The questionnaire is sensitive to the unique aspects of a FPFD on sexual function and how it affects the life of an affected patient. The PISQ-IR is a valid and reliable questionnaire and contains 20 items that assess 6 domains: Desire, Arousal, Orgasm, Pain, Partner, and Condition impact (POP/UI).[8] Translation and adaptation of this instrument for Arabic-speaking women will enable us to collect data about an important and under-recognized condition in this population, especially because of cultural norms that discourage discussion of these issues. The aim of this study was to translate and adapt the PISQ-IR questionnaire and then to assess its validity and reliability to evaluate sexual health among Arabic-speaking women with pelvic floor disorders

MATERIALS AND METHODS

The study was approved by the Ethical Committee of the University at the Asyut University Urology Hospital, Asyut, Egypt.

PISQ-IR: Description and Adaptation

The PISQ-IR, a valid and reliable questionnaire and contains 20 items, is intended to be self-administered. If the woman cannot read the research nurse provided nondirective assistance. The questionnaire is divided into 2 major parts: the first part (Q 2 thru 6) is directed to women who are not sexually active (NSA) and the second part (Q7 thru 20) to those who are sexually active (SA). The sexually active part consists of 6 subscales: arousal/orgasm: 4 items (Q7, 8a, 10, 11); partner-related issues: 3 items (Q13 and 14a and 14b); condition specific issues 3 items: Q 8a, 8b, 9; global quality: 4 item (Q 19a, 19b, 19c, 20a); condition impact: 4 items: (Q18, 20b, 20c, 20d); and desire: 3 items (Q15, 16, 17). The sexually inactive part consists of 4 domains: partner-related issues, condition specific issues, global quality, and condition impact.[8]

Cultural Adaptation

In the adaptation process, it was important to keep in mind the cultural norms among the Arabic-speaking women, thus it was necessary to modify some items from the original questionnaire. All questions specified sex to be practiced with the husband only. For Q3: the phrase “bulging in the vagina (either the bladder, rectum or uterus….” which were not understood by our patients were replaced by “vaginal prolapse”. Q12 was modified to inquire about the date of marriage as it would be culturally not acceptable to ask a woman in such a Middle East culture if she has a partner.

Linguistic Validation

The aim was to translate the questionnaire into clear, easy to understand and conceptually equivalent to the original version.[9] This was accomplished in 2 steps: forward translations and backward translation. The forward translation consists of translation of the questionnaire to the Arabic (target) language by 2 translators who are native Egyptian language speakers and bilingual in English language producing 2 translations of the questionnaire into Arabic language. The study coordinator then discussed the translations with each translator and

agreed on a one version. It was then sent to the IUGA Research and Development (R&D) committee and IUGA sexual Function Group for final notes to produce first version (V1).

Focus Group (Cognitive Interview)

The questionnaire was administered to a group of patients with POP, AI, and/or UI attending the outpatient Female Urology Clinic. The purpose was to discuss each individual item in the questionnaire to make sure that each question conveys the intent and meaning of this question to participants. The interview assessed whether the language used was simple and appropriate. These interviews were conducted both in one-on-one sessions (one patient only) and small focus groups (2–4 patients in each session). It included 8 women with POP and/or UI. During the interviews, the questionnaire was reported to be easy to understand and unambiguous by the women. After that, the final wordings were established for each question in the instrument and a pooled version of the questionnaire was completed (V2).

Backward Translation

The V2 version of the questionnaire was translated back into English. This back translation was not done by the original translators, but by another independent translator. As recommended by the IUGA, the final translation and the back-translation into English were submitted to the IUGA Translation Working Group for review and comparison of the backward version with the original questionnaire was done.

Validation Study

The questionnaire was administered to a group of women with UI, FI and/or POP symptoms to assess each item performance (internal consistency) and test-retest reliability. Women attending the Female Urology outpatient clinic, Asyut University Urology Hospital with complaint of POP and/or UI were invited to participate. This is the biggest tertiary referral center in Upper Egypt that receives patients with different socioeconomic and educational levels. After explaining the nature of the study, informed consent was obtained. The questionnaire is intended to be self administered. The Research Nurse (RN) provided non assistance guidance to those who can not read to write. Women in the Middle East are embarrassed to disclose sensitive information about their sexual relation. Those women may feel more comfortable with female research nurse. Evaluation included complete history and physical examination including POP-Q staging. Women with Vulvodynia, painful bladder syndrome, chronic pelvic pain, and neurological deficit were excluded. Women were then asked to come back to the clinic after 2 weeks and were asked to complete the questionnaire again to assess the stability of the questionnaire over time.

Statistical Analysis

PISQ-IR scale scoring for SA and NSA were calculated using transformed sum (scored as 0 to 100) and the scale was set to missing if over 50% items were not answered as recommend by Rogers et al.[8] Thus, one missing was allowed for scales with 2 or 3 items, and 2 missing were allowed for scales with 4 items. The missing pattern of each item in the questionnaire was examined. Internal consistency is a measure of how well items in the same scale correlate with each other as an indicator if these items are measuring a similar concept, and

the standardized Cronbach's coefficient α was calculated.[10] Patients who completed the questionnaire twice, at baseline and again after 2 weeks, were used for assessing test-retest reliability. The difference between test and retest surveys in the NSA and SA scales was first calculated and the paired t-test was performed to identify significant difference between these repeated scores. The family-wise error rate adjustment for multiple comparisons, based on Hochberg's method, was used Further, the Lin's concordance correlation coefficient (CCC) was calculated. Lin's CCC ranges from −1 to 1 and a value of 1 represents complete agreement.[11] As a second measure of absolute/apparent reliability, we considered whether the absolute differences between test and retest were greater than 10%. We set *a priori* (before data analysis) that differences between test and retest of no more than 10% would be additional evidence of reliability, augmenting information provided by the concordance coefficient. Analyses were performed using SAS 9.3 (Cary, North Carolina).

RESULTS

The final version of the questionnaire was administered to 172 subjects, with 30 NSA and 142 SA women. The basic characteristics of study subjects are summarized in table 1. Predominantly, subjects have at most a primary school level education (91.2%) and 7% were diabetics. Diagnosis reported included 40.1% SUI, 30.2% Urgency incontinence, 26.2% SUI and POP and 3.5% mixed incontinence. Sixty-eight percent reported no previous operation; 52.3% have a surgery planned; 67.4% were premenopausal. Vaginal delivery was predominant (88.4%) and most subjects reported no medical disease (90.1%).

Item Response

Item nonresponse within each NSA and SA scale are summarized in Table 2. For NSA scale, the response rate was 100% for all scales except for NSA-CS (condition specific), which had 2 nonresponses from both first (6.7%) and second (7.4%) questionnaire administrations. Since no subject missed 50% of the items, all NSA scales were calculated from all subjects for both administrations. For the SA scale, the nonresponse rate from the first administration was mostly below 10% for items in SA-AO (arousal/orgasm), SA-CS, SA-GQ (global quality), and SA-D (desire), and mostly above 10% for SA-PR (partner related) and SA-CI (condition impact). The proportion of subjects responded at least 50% of items were above 95% for all but SA-PR (91.5%). The nonresponse rate of SA from the second administration was similar but the proportion of over 50% nonresponse items in SA-PR increased to 14.4%.

Internal Consistency

The internal consistency for each scale is reported in Table 3, using Cronbach's coefficient α. Good internal consistency was observed for SA-GQ (α = 0.86), SA-CI (α = 0.87) and SA-D (α = 0.82) along with SA-CS (α = 0.74) and SA-PR (α = 0.75) and acceptable for SA-AO (α = 0.66). The internal consistency was poor for all NSA scales with $\alpha < 0.6$.

Test-Retest Reliability

The same questionnaire was administered a second time - 2 weeks after the initial administration - to 27 NSA and 90 SA women of the original cohort. Table 4 provides the difference and correlation between the 2 repeated responses. The mean difference of scales

ranged from −1.0 to 3.3 for the NSA scales and −0.4 to 2.8 for the SA scales. The difference between test and retest for all scale was not significant. More, CCC measuring concordance/agreement ranged from 0.81 to 0.87 for the NSA scales, except for NSA-CI with a CCC of only 0.63. CCC for SA scales was typically stronger, ranging from 0.85 (for SA-PR) to 0.96 (for the SA-CI). We also considered a more strict criteria of apparent agreement, which is that the difference between test and retest must be no more than 10% (Table 4). By this strict criteria, NSA-GQ scale had 85% agreement, but the other 3 NSA scales were low (44%–52%). For SA scales, this apparent agreement was high, greater than 72%, except SA-PR (54%).

DISCUSSION

The most valid way of measuring the presence, severity, and impact of sexual dysfunction on a patient's activities and well-being is through the use of psychometrically sound questionnaires. We describe the validation and adaptation of the PISQ-IR as a condition-specific tool to assess sexual function of women with PFDs. Validating these questionnaires allows the study and better treatment of Arabic speaking groups with pelvic floor disorders, applicable in many countries around the world. In addition, it will help to screen the minor group of women who are hesitant to initiate talks about their sexual concerns especially in such the conservative middle east community.[13] The IUGA committee has previously validated the questionnaire to different international cultures.[8] We have presented in this study the validation and cultural adaptation of the PISQ-IR to be used to assess sexual function in Arabic women with POP, UI and or FI.

It was important to culturally adapt the questionnaire to the intended community. Our PISQ-IR did consider the unique cultural circumstances of Middle Eastern women. Thus it was necessary to modify some items from the original questionnaire. Religion in the Middle East plays an important role in shaping the health behavior of women; thus, all questions specified the sexual practice in the context of the husband-wife relationship.

Our study confirmed that the PISQ-IR is a psychometrically sound instrument with good reliability and validity for sexual function among sexually active Arabic women with POP, FI and/o UI. The internal consistency was good for 5 of 6 SA scales (α 0.74 to 0.87) and acceptable for arousal orgasm subscale ($\alpha = 0.66$). The test-retest analysis showed the repeat scores to be highly concordant for all scales (CCC>0.84), indicating good overall agreement. Furthermore, our additional, more strict, criteria of difference between test-retest measurement of no more than 10% also indicated good agreement for the 5 scales (>72%). The response rate was high and women found the questionnaire easy to understand, and quick and easy to complete and interpret. However, among sexually inactive Arabic women with POP, FI and/o UI, the internal consistency was low for all 4 NSA scales ($\alpha<0.6$) and the even though the concordance was good for 3 scales (CCC>0.8). The limitations of our study are women with fecal incontinence were not included, the number of NSA women was small. Furthermore, because of the lack of available tools to assess FSD in Arabic currently, the results here would be strengthen in future studies where the PISQ-IR is compared/correlated with other measurements for sexual function or pelvic floor dysfunction for Arabic women.

CONCLUSION

Our preliminary findings indicate that the PISQ-IR is a psychometrically sound instrument with good test-retest reliability and validity to evaluate sexual function among sexually active Arabic women with POP and/or UI; however, for sexually inactive Arabic women internal consistency is poor.

Acknowledgments

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ABBREVIATIONS

FSD	female sexual dysfunction
POP	Pelvic organ prolapse
QoL	quality of life
PISQ-IR	Pelvic Organ Prolapse Incontinence Sexual Function Questionnaire IUGA revised
IUGA	The International Urogynecological Association
UI	Urinary incontinence
FI	Fecal Incontinence
SA	Sexually Active part of the questionnaire
NSA	Non Sexually Active part of the questionnaire
CCC	concordance correlation coefficient

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Appendix

PISQ-IR: Sexual Function for Women with pelvic organ prolapse, Urinary Incontinence and/or Fecal Incontinence

Q1 Which of the following best describes you?

a. Not sexually active at all → Go to item Q2 - Not Active Section

b. Sexually active normally with husband → Go to item Q7 - Sexually Active Section

Sexualy Inactive section (Q2 thru 6)

Q2 The following are list of reasons why you might not be sexual active with your husband, for each one please indicate how strongly your agree or disagree with it as a reason that you are not sexual active.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a Husband absent (traveling, divorced, passed away)	1	2	3	4
b No Interest	1	2	3	4
C Due to bladder or bowel problems (urinary or fecal incontinence) or due to prolapse	1	2	3	4
d Because of my other health problems	1	2	3	4
e Pain	1	2	3	4

Q3 How much does the **fear** of leaking urine and/or stool and/or a bulging in the vagina (either the bladder, rectum or uterus falling out) cause you to avoid or restrict your sexual activity?

1. Not at All

2. A Little
3. Some
4. A Lot

Q4 For each of the following, please circle the number between 1 and 5 that best represents how you feel about your sex life.

		Rating					
a.	Satisfied	1	2	3	4	5	Dissatisfied
b.	Adequate	1	2	3	4	5	Inadequate

Q5 How strongly do you agree or disagree with each of the following statements:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a. I feel frustrated by my sex life	1	2	3	4
b. I feel sexually inferior because of my incontinence and/or prolapse	1	2	3	4
c. I feel angry because of the impact that incontinence and/or prolapse has on my sex life	1	2	3	4

Q6 Overall, how bothersome is it to you that you are not sexually active?

1. Not at All
2. A Little
3. Some
4. A Lot

Sexually Active Section (Q7 thru 20)

Q7 How often do you feel sexually aroused (physically excited or turned on) during sexual activity with your husband

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

Q8 When you are involved in sexual activity, how often do you feel each of the following:

	Never	Rarely	Sometimes	Usually	Almost Always
a. Fulfilled	1	2	3	4	5
c. Shame	1	2	3	4	5
d. Fear	1	2	3	4	5

Q9 How often do you leak urine and/or stool with <u>any type</u> of sexual activity?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

Q10 Compared to orgasms you have had in the past, how intense are your orgasms now?

1. Much less intense
2. Less intense
3. Same intensity
4. More intense
5. Much more intense

Q11 How often do you feel pain during sexual intercourse?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

Q12 What is the duration of your marriage?

Q13 How often does your husband have a problem during sexual intercourse (lack of arousal, desire, erection, etc.) that limits your sexual activity?

1. All of the time
2. Most of the time
3. Some of the time
4. Hardly ever/Rarely

Q14 In general, would you say that your husband has a positive or negative impact on each of the following:

	Very Positive	Somewhat Positive	Somewhat Negative	Very Negative
a. Your sexual desire	1	2	3	4
b. The frequency of your sexual activity	1	2	3	4

Q15 When you are involved in sexual activity with your husband, how often do you feel that you want more?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

Q16 How frequently do you have sexual desire, this may include wanting to have sex, having sexual thoughts or fantasies, etc.?

1. Daily
2. Weekly
3. Monthly
4. Less often than once a Month
5. Never

Q17 How would you rate your level (degree) of sexual desire or interest?

1. Very high
2. High
3. Moderate
4. Low
5. Very low or none at all

Q18 How much does the fear of leaking urine, stool and/or a bulging in the vagina (prolapse) cause you to avoid sexual activity?

1. Not at All
2. A Little
3. Some
4. A Lot

Q19 For each of the following, please circle the number between 1 and 5 that best represents how you feel about your sex life.

		Rating					
a	Satisfied	1	2	3	4	5	Dissatisfied
b	Adequate	1	2	3	4	5	Inadequate
c	Confident	1	2	3	4	5	Not Confident

Q20 How strongly do you agree or disagree with each of the following statements:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a. I feel frustrated by my sex life	1	2	3	4
b. I feel sexually inferior because of my incontinence and/or prolapse	1	2	3	4
c. I feel embarrassed about my sex life	1	2	3	4
d. I feel angry because of the impact that incontinence and/or prolapse has on my sex life	1	2	3	4

Table 1

Basic Characteristics of Study Subjects

	N= 172
Age (mean, SD)	43 (9.4)
Educational Level	
Illiterate	55.2%
Primary school level	36.0%
High School Level	6.4%
College	2.3%
Parity (median, range)	5 (0,10)
Mode of Delivery	
Vaginal	88.4%
C section	3.5%
Vaginal delivery & C section	4.7%
Nulliparous	3.5%
Hormonal State	
Premenopausal	67.4%
Postmenopausal	32.6%
Diagnosis	
SUI	40.1%
Urge Incontinence	30.2%
Mixed Incontinence	3.5%
SUI and POP	26.2%
Prolapse Stage	
► Cystocele	Stage II (mean Aa point 1.7 cm)
► Rectocele	Stage II (mean Ap point 1.2 cm)

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Table 2

Nonresponses for each item for sexually active (SA) and not sexually active (NSA) scale.

Scale	Item	First Administration				Second Administration			
		Missing in each item	Proportion of missing items in each scale			Missing in each item	Proportion of missing items in each scale		
			None	≤50%	>50%		None	≤50%	>50%
Sexually Inactive		N=30				N=27			
NSA-CS	Q2c	0	28 (93.3%)	2 (6.7%)	0	0 (0.0%)	25 (92.6%)	2 (7.4%)	0
	Q2d	2 (6.7%)				1 (3.7%)			
	Q2e	0				1 (3.7%)			
NSA-PR	Q2a	0	30 (100%)	0	0	0	27 (100%)	0	0
	Q2b	0				0			
NSA-GQ	Q4a	0	30 (100%)	0	0	0	27 (100%)	0	0
	Q4b	0				0			
	Q5a	0				0			
	Q6	0				0			
NSA-CI	Q3	0	30 (100%)	0	0	0	27 (100%)	0	0
	Q5b	0				0			
	Q5c	0				0			
Sexually Active		N=142				N=90			
SA-AO	Q7	1 (0.7%)	131 (92.3%)	11 (7.7%)	0	0	86 (95.6%)	4 (4.4%)	0
	Q8a	9 (6.3%)				3 (3.3%)			
	Q10	1 (0.7%)				1 (1.1%)			
	Q11	0 (0.0%)				0			
SA-CS	Q8b	5 (3.5%)	131 (92.3%)	6 (4.2%)	5 (3.5%)	2 (2.2%)	84 (93.3%)	4 (4.4%)	2 (2.2%)
	Q8c	9 (6.3%)				6 (6.7%)			
	Q9	2 (1.4%)				0			
SA-PR	Q13	17 (12.0%)	101 (71.1%)	29 (20.4%)	12 (8.5%)	7 (7.8%)	68 (75.6%)	9 (10.0%)	13 (14.4%)
	Q14a	15 (10.6%)				16 (17.8%)			
	Q14b	28 (19.7%)				16 (17.8%)			

Scale	Item	First Administration				Second Administration			
		Missing in each item	Proportion of missing items in each scale			Missing in each item	Proportion of missing items in each scale		
			None	≤50%	>50%		None	≤50%	>50%
SA-GQ	Q19a	13 (9.2%)	117 (82.4%)	19 (13.4%)	6 (4.2%)	6 (6.7%)	72 (80.0%)	16 (17.8%)	2 (2.2%)
	Q19b	11 (7.7%)				1 (1.1%)			
	Q19c	8 (5.6%)				5 (5.6%)			
	Q20a	16 (11.3%)				13 (14.4%)			
SA-CI	Q18	1 (0.7%)	110 (77.5%)	26 (18.3%)	6 (4.2%)	2 (2.2%)	71 (78.9%)	19 (21.1%)	0
	Q20b	22 (15.5%)				9 (10.0%)			
	Q20c	19 (13.4%)				9 (10.0%)			
	Q20d	16 (11.3%)				6 (6.7%)			
SA-D	Q15	7 (4.9%)	124 (87.3%)	14 (9.9%)	4 (2.8%)	4 (4.4%)	79 (87.8%)	11 (12.2%)	0
	Q16	7 (4.9%)				3 (3.3%)			
	Q17	10 (7.0%)				4 (4.4%)			

Table 3

The mean transformed sum score and Cronbach's coefficient α for each scale.

Scale	N	Transformed Sum Score Mean ± SD	Standardized Cronbach's Coefficient α
NSA-CS	30	48.7 ± 17.6	<0
NSA-PR	30	41.0 ± 29.8	0.40
NSA-GQ	30	70.9 ± 15.9	0.59
NSA-CI	30	58.9 ± 21.3	0.47
SA-AO	142	47.3 ± 17.1	0.66
SA-CS	137	65.8 ± 22.3	0.74
SA-PR	130	66.8 ± 20.6	0.75
SA-GQ	136	55.9 ± 26.2	0.86
SA-CI	136	55.8 ± 30.0	0.87
SA-D	138	52.6 ± 21.6	0.82

Table 4

Test-retest reliability.

Scale	N	Difference (Second-First) Mean ± SD	Lin's Concordance Correlation Coefficient	Acceptable Agreement (Absolute Difference ≤10%) N (%)
NSA-CS	27	−1.0 ± 11.7	0.81	13 (48.1%)
NSA-PR	27	3.1 ± 14.6	0.87	12 (44.4%)
NSA-GQ	27	−0.2 ± 8.1	0.83	23 (85.2%)
NSA-CI	27	0.9 ± 18.4	0.63	14 (51.9%)
SA-AO	90	−0.4 ± 7.3	0.90	77 (85.6%)
SA-CS	86	1.4 ± 9.5	0.89	70 (81.4%)
SA-PR	76	2.2 ± 11.7	0.85	41 (53.9%)
SA-GQ	85	1.1 ± 10.3	0.87	64 (75.3%)
SA-CI	85	2.8 ± 10.7	0.96	62 (72.9%)
SA-D	87	2.4 ± 12.0	0.87	72 (82.8%)