

ORIGINAL ARTICLE

Impact of Relationship Duration on Sexual Satisfaction – Evidence from Bangladeshi Couples Using the Bangla NSSS-S

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Mohammad Asif-Al-Naim¹, Kamrun Nahar², Golam Mostafa³, Taiyeb Ibna Zahangir⁴, Raihan Siddique⁵

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Gopalganj Medical College, Gopalganj, Bangladesh

Correspondence to

Mohammad Asif-Al-Naim

ORCID

<https://orcid.org/0009-0003-1056-3819>

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ABSTRACT

Background: Sexual satisfaction is a vital component of marital well-being, yet its relationship with the duration of marriage remains complex and underexplored in conservative societies such as Bangladesh. The New Sexual Satisfaction Scale–Short Form (NSSS-S) has not been previously validated in Bangla. **Aim of the study:** To assess the association between relationship duration and sexual satisfaction among Bangladeshi married adults using the Bangla-adapted NSSS-S, and to validate its psychometric properties. **Methods & Materials:** A cross-sectional analytical study was conducted among 120 sexually active married adults at BSMMU, Dhaka. Data were collected using structured interviews, including sociodemographic variables, the Bangla NSSS-S, and the Arizona Sexual Experience Scale (ASEX). Reliability was assessed using Cronbach's alpha. ANOVA, Pearson's correlation, and effect size analyses were performed using SPSS 26. **Result:** The Bangla NSSS-S demonstrated excellent internal consistency ($\alpha = 0.97$). Sexual satisfaction significantly declined with increasing relationship duration (mean NSSS-S scores: ≤ 5 years = 45.2 ± 6.4 vs. > 15 years = 37.9 ± 8.3 , $p < 0.001$). Relationship duration showed a moderate negative correlation with total sexual satisfaction ($r = -0.468$, $p < 0.001$). Higher marital satisfaction was strongly associated with greater sexual satisfaction (Cohen's $d = 0.8-1.19$). **Conclusion:** Longer relationship duration is associated with decreased sexual satisfaction among Bangladeshi couples. The Bangla NSSS-S is a reliable tool for assessing sexual satisfaction in this population. Interventions focused on emotional intimacy and communication may help sustain sexual satisfaction in long-term relationships.

Keywords: Sexual satisfaction, Relationship duration, NSSS-S Bangla, Married couples, Psychometric validation, Bangladesh.

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1. Assistant Registrar (Psychiatry), National Institute of Mental Health, (NIMH), Dhaka, Bangladesh
2. Assistant Professor (Psychiatry), Noakhali Medical College, Bangladesh
3. Medical officer, 250 Bed General Hospital, Noakhali, Bangladesh
4. Assistant Professor (Psychiatry), National Institute of Mental Health (NIMH), Dhaka, Bangladesh
5. Assistant Professor (Psychiatry), Delta Medical College and Hospital, Dhaka, Bangladesh

INTRODUCTION

An emotional reaction generated by one's personal appraisal of the favorable and unfavorable dimensions of their sexual relationship [1]. Globally, sexual satisfaction often improves during the first year of a relationship, attributed to the novelty and learning about each other's preferences. However, this satisfaction tends to decline over time, possibly due to reduced novelty and changes in sexual desire [2]. In Bangladesh, among Muslim couples, 22.76% had been married for 11-15 years, with a corresponding sexual frequency of 0.7 times per month, while 5.52% had been married for 26-30 years, with a sexual frequency of 10.49 times per month [3]. The New Sexual Satisfaction Scale - Short Form (NSSS-S) is a concise 12-item instrument designed to capture individuals' appraisal of their sexual life over the recent past, typically the prior six months, using a 5-point Likert response format (1 = Not at all satisfied to 5 = Extremely satisfied) [4]. It emerged as a shortened version of the original 20-item NSSS-S, which was developed on a conceptual framework including sexual sensations,

awareness, exchange, emotional closeness, and activity [4,5]. Although the original authors found a two-factor structure, ego-centered and partner/activity-centered in some samples, subsequent validations of the NSSS-S often report a unidimensional structure, or variable factor solutions depending on cultural context [5,6]. Psychometrically, the scale has demonstrated strong internal consistency ($\alpha \sim .90-.95$) in multiple language adaptations and shows good convergent validity with other sexual-satisfaction measures [7,8]. Marital sexual behavior, especially sexual frequency, not only depends on couples' values, norms, and attitudes toward sexual activity, including their socio-economic and ethnic statuses, but also on their age characteristics and duration of marital life. Actually, how many times a couple in a week or a month or a year will engage in sexual intercourse or coitus depends on the couple's biological and marital age cycle, attitude and motivation to sex, physiological fitness, including socio-cultural-environmental conditions favorable to engage in sexual activities [9]. In many societies, the duration of a romantic or marital relationship is considered a marker of

stability and maturity of a partnership; yet, the dynamics of sexual satisfaction over time remain complex. Some international studies suggest that sexual satisfaction may increase during the early years of a relationship when novelty and sexual exploration are high, but may decline or plateau as relationships become longer in duration, often due to habituation, decreased novelty, changes in sexual functioning, or shifts in relationship dynamics. Although intercourse frequency often decreases over time, a decline in sexual satisfaction may persist beyond frequency changes alone [7,9]. Interventions aimed at enhancing sexual satisfaction among couples typically combine psycho-educational, behavioral, and relational therapies. Structured couples therapy that incorporates sex-therapy techniques and communication training has been shown to significantly improve sexual satisfaction and sexual functioning [10,11]. Relational approaches such as Emotionally Focused Therapy (EFT) have demonstrated efficacy in boosting both emotional closeness and physical sexual satisfaction by enabling partners to express needs, vulnerabilities, and desires in a safe context [12]. This study aimed to examine the association between the duration of a committed relationship in years and sexual satisfaction among Bangladeshi couples, as measured by the Bangla-adapted version of the New Sexual Satisfaction Scale-Short Form (NSSS-S).

METHODS & MATERIALS

This study employed a cross-sectional analytical design aimed at translating, culturally adapting, and psychometrically validating the Bangla version of the New Sexual Satisfaction Scale-Short Form (NSSS-S) while exploring the association between relationship duration and sexual satisfaction among Bangladeshi married couples. The investigation was conducted in the Department of Psychiatry, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh, from October 2021 to September 2023. Data collection occurred between March and June 2023 through structured, face-to-face interviews conducted in a private, confidential setting.

Study Population and Sampling

The study population comprised Bangla-speaking, sexually active, married adults aged 18 years and above. To ensure diversity in sexual satisfaction and relationship experiences, both clinical and non-clinical groups were included. The clinical group consisted of patients seeking consultation for sexual difficulties at the Psychiatric Sex Clinic (PSC Clinic), while the non-clinical group included resident doctors, nurses, and psychotherapy trainees from the Departments of Psychiatry and Neurology at BSMMU. A total of 120 participants were recruited through a purposive sampling method. Relationship duration ranged from 1 year to over 15 years, allowing for subgroup analysis by duration categories.

Inclusion Criteria:

- Married males and females aged 18 years or older.
- Sexually active individuals engaging in partnered sexual activity within the past six months.
- Participants with adequate Bangla literacy to comprehend questionnaire items.

Exclusion Criteria:

- Presence of acute psychiatric illness.
- Current acute or chronic medical conditions that may impair sexual activity.

- Use of psychotropic or hormonal medications known to affect sexual functioning.
- Pregnant women or those within six months postpartum.

Ethical Considerations

Ethical clearance was obtained from the Institutional Review Board (IRB) of Bangabandhu Sheikh Mujib Medical University (BSMMU). Participants were fully informed of the study's purpose, confidentiality measures, and their right to withdraw at any time without repercussions. Privacy was maintained throughout all stages of data collection and analysis.

Instruments

Data were collected using a structured questionnaire comprising three sections:

1. Sociodemographic and relationship characteristics — including age, gender, education, residence, and relationship duration.
2. New Sexual Satisfaction Scale-Short Form (NSSS-S) — a 12-item instrument assessing satisfaction across individual, partner-related, and behavioral domains. Each item was rated on a 5-point Likert scale, with higher scores reflecting greater satisfaction. The Bangla version was developed following standardized cross-cultural adaptation procedures, including forward translation, synthesis, back-translation, expert committee review, and pretesting among ten participants for clarity and cultural appropriateness.
3. Arizona Sexual Experience Scale (ASEX-Bangla version) — a validated five-item tool used to assess sexual functioning, supporting convergent and divergent validity analyses.

Data Collection

After obtaining written informed consent, participants were interviewed individually by trained researchers in a quiet, confidential environment. Interviews lasted approximately 20 minutes and were designed to minimize discomfort and encourage open communication. Completed forms were reviewed for completeness and accuracy prior to data entry.

Statistical Analysis

Data were analyzed using IBM SPSS Statistics version 26. Before analysis, the dataset was thoroughly examined for missing values, normality, and outliers to ensure data quality and accuracy. Descriptive statistics, including mean, standard deviation, frequency, and percentage, were used to summarize participants' sociodemographic and relationship characteristics. The reliability of the Bangla version of the NSSS-S items was assessed using Cronbach's alpha (α) to evaluate internal consistency. To compare mean sexual satisfaction scores across different relationship duration groups (≤ 5 , 6–10, 11–15, and >15 years), a one-way analysis of variance (ANOVA) was performed, followed by post-hoc Tukey tests to identify pairwise differences between groups. Pearson's correlation coefficient (r) was calculated to determine the strength and direction of relationships between relationship duration and sexual satisfaction variables. Additionally, Cohen's d was computed to estimate the effect size for differences in sexual satisfaction across varying levels of self-rated marital satisfaction. A p -value of less than 0.05 was considered statistically significant for all analyses.

RESULT

The mean age of participants was 33.9 ± 8.3 years; 13.3% were aged 18–28 years, 75.00% were 29–39 years, 8.33% were 40–50 years, and 3.33% were above 50 years. Males comprised 65.83% and females 34.17%. Regarding education, 0.83% had primary, 12.50% secondary, 18.33% higher secondary, and 68.33% graduate level education. Most participants (90.00%) were urban residents shown in (Table I). Table II illustrates that the mean scores ranged from 2.51 ± 1.18 for frequency of sexual activity to 3.03 ± 0.97 for sexual reaction to partner. Item total correlations ranged from 0.80 for sexual reaction to partner, partner's sexual creativity, and variety of sexual activity to 0.94 for mood after sex. Cronbach's α if the item was deleted ranged from 0.970 to 0.973. Among 120 respondents mean NSSS-S scores decreased with relationship duration, from 45.2 ± 6.4 for ≤ 5 years to 37.9 ± 8.3 for >15 years. The difference was statistically significant ($p < 0.001$) explained in (Table III). Total NSSS-S scores decreased from 45.2 ± 6.4 for ≤ 5 years to 37.9 ± 8.3 for >15 years. Individual, partner-related, and behavioral satisfaction also declined with p-values of 0.001, 0.004, and 0.01, respectively, highlighted in (Table IV). Table V demonstrated a significant negative correlation between relationship duration and total NSSS-S ($r = -0.468$, $p < 0.001$), individual satisfaction ($r = -0.451$, $p < 0.001$), partner-related satisfaction ($r = -0.433$, $p < 0.001$), and behavioral satisfaction ($r = -0.401$, $p < 0.001$), and behavioral satisfaction ($r = -0.401$, $p < 0.001$). ASEX total score exhibited a positive

correlation ($r = 0.392$, $p < 0.001$). Satisfied participants reported the highest mean NSSS-S score (44.6 ± 6.8), followed by neutral (39.1 ± 7.4) and dissatisfied (35.8 ± 7.9) groups. Effect sizes were moderate to large (Cohen's $d = 0.8$ and 1.19), with significant differences ($p = 0.002$ and <0.001) revealed in (Table VI).

Table – I: Sociodemographic and Relationship Characteristics of Participants (n=120)

Characteristic	Frequency (n)	Percentage (%)
Age (years)		
18–28	16	13.33
29–39	90	75.00
40–50	10	8.33
>50	4	3.33
Mean \pm SD	33.9 ± 8.3	
Gender		
Male	79	65.83
Female	41	34.17
Education		
Primary	1	0.83
Secondary	15	12.50
Higher Secondary	22	18.33
Graduate	82	68.33
Residence		
Urban	108	90.00
Rural	12	10.00

Table – II: Item characteristics of NSSS-S Bangla Version (n=120)

Item	Mean \pm SD	Item-Total Correlation	Cronbach's α if Item Deleted
Quality of my orgasm	2.78 ± 1.32	0.89	0.971
Surrendering to sexual pleasure	2.70 ± 1.26	0.83	0.971
My sexual reaction to partner	3.03 ± 0.97	0.8	0.973
My body's sexual functioning	2.71 ± 1.36	0.84	0.972
My mood after sex	2.62 ± 1.48	0.94	0.97
Pleasure I provide to my partner	2.75 ± 1.25	0.87	0.972
Balance between give and receive	2.66 ± 1.20	0.89	0.971
Partner's emotional opening	3.03 ± 1.08	0.82	0.973
Partner's ability to orgasm	2.73 ± 1.48	0.9	0.971
Partner's sexual creativity	2.90 ± 0.99	0.82	0.973
Variety of my sexual activity	2.88 ± 0.95	0.82	0.973
Frequency of my sexual activity	2.51 ± 1.18	0.85	0.972

Table – III: Mean NSSS-S scores by relationship duration

Relationship Duration (years)	Frequency (n)	Percentage (%)	Mean \pm SD (Total NSSS-S)	p-value
≤ 5	26	21.7	45.2 ± 6.4	<0.001
6–10	41	34.2	42.6 ± 7.1	
11–15	33	27.5	39.8 ± 7.9	
>15	20	16.6	37.9 ± 8.3	

Table – IV: Relationship duration and NSSS-S Subscale Scores

Domain	≤ 5 years	6–10 years	11–15 years	>15 years	p-value
Individual satisfaction	23.4 ± 4.9	21.7 ± 5.2	20.1 ± 5.7	19.3 ± 5.8	0.001
Partner-related satisfaction	22.1 ± 4.4	20.9 ± 4.8	19.8 ± 5.1	18.6 ± 5.4	0.004
Behavioral satisfaction	22.3 ± 4.3	21.0 ± 4.6	20.1 ± 5.2	19.7 ± 5.3	0.01
Total NSSS-S	45.2 ± 6.4	42.6 ± 7.1	39.8 ± 7.9	37.9 ± 8.3	<0.001

Table – V: Correlation between relationship duration and sexual satisfaction variables (n=120)

Variables	Pearson's r	p-value
Duration \times Total NSSS-S	-0.468	<0.001
Duration \times Individual Satisfaction	-0.451	<0.001
Duration \times Partner-related Satisfaction	-0.433	<0.001
Duration \times Behavioral Satisfaction	-0.401	<0.001
Duration \times ASEX Total Score	0.392	<0.001

Table – VI: Group comparison by marital satisfaction level

Marital Satisfaction (self-rated)	Frequency (n)	Percentage (%)	Mean \pm SD (NSSS-S)	Cohen's d	p-value
Satisfied	82	68.3	44.6 \pm 6.8	—	—
Neutral	23	19.2	39.1 \pm 7.4	0.8	0.002
Dissatisfied	15	12.5	35.8 \pm 7.9	1.19	<0.001

DISCUSSION

Sexual satisfaction can be conceptualized through subjective, relational, and behavioral dimensions, each capturing different aspects of individual and couple experiences [13]. This study rigorously investigated the association between marital duration and sexual satisfaction among Bangladeshi married adults, utilizing the psychometrically validated Bangla adaptation of the New Sexual Satisfaction Scale-Short Form (NSSS-S). The majority of participants were aged 29–39 years (75%), with a mean age of 33.9 \pm 8.3 years, and males constituted 65.8% of the sample. Urban residents (90%) and individuals with university-level education (68.3%) predominated, reflecting a cohort characterized by higher literacy, greater exposure to sexual health information, and potentially elevated health-seeking behaviors. Nonetheless, this demographic profile may also be associated with increased psychosocial stressors, including occupational demands, societal expectations, and lifestyle-related pressures, which have been consistently linked to variations in sexual satisfaction in comparable Asian populations. These sociodemographic attributes are therefore critical in contextualizing the observed patterns of sexual satisfaction and provide a nuanced framework for interpreting the interplay between relationship duration and sexual well-being within this population. [14,15]. The Bangla version of the NSSS-S demonstrated excellent psychometric reliability, evidenced by a Cronbach's α of 0.97, indicating a high level of internal consistency across the scale. Furthermore, all individual items exhibited strong item-total correlations, ranging from 0.80 to 0.94, reflecting the coherence and consistency of the items in capturing the construct of sexual satisfaction. These findings provide robust support for the scale's validity and confirm its appropriateness as a reliable instrument for assessing sexual satisfaction among Bangladeshi couples. Notably, these results are in alignment with prior validation studies conducted in similar populations, which have consistently reported high reliability and validity metrics for the NSSS-S, thereby reinforcing the scale's cross-cultural applicability and utility in research on sexual well-being [8,16]. This ensures that the observed decline in satisfaction is genuine and not a measurement artifact. There was a clear and statistically significant decline in total NSSS-S scores with increased relationship duration ($p < 0.001$). Couples in relationships ≤ 5 years scored highest (45.2 \pm 6.4), while those > 15 years scored the lowest (37.9 \pm 8.3). All subdomains, individual, partner-related, and behavioral satisfaction, followed the same downward trend ($p=0.001$ – 0.01). This supports earlier findings from Schmiedeborg & Schröder (2016), who reported reductions in sexual satisfaction as relationships progress due to loss of novelty, routine sexual behavior, hormonal changes, and increased life stress [2]. Pearson's correlation further confirmed a moderate negative relationship between duration and total NSSS-S score ($r = -0.468$, $p < 0.001$). The strongest associations were seen in individual satisfaction ($r = -0.451$) and partner-related satisfaction ($r = -0.433$). Additionally, relationship duration was positively correlated with ASEX scores (sexual dysfunction scale) ($r = 0.392$, $p < 0.001$), indicating that longer relationships are associated with greater sexual difficulties. This supports international findings

linking relationship length with decreased arousal and increased dysfunction [17]. Marital satisfaction strongly influenced sexual satisfaction. Those satisfied with their marriage scored significantly higher (44.6 \pm 6.8) than neutral (39.1 \pm 7.4) and dissatisfied couples (35.8 \pm 7.9). Large effect sizes (Cohen's $d=0.8$ – 1.19) indicate a strong practical impact. This confirms prior evidence that sexual satisfaction is deeply intertwined with emotional closeness and relationship quality [18].

Limitations of the study: This study has certain limitations. Its cross-sectional design restricts causal interpretations between relationship duration and sexual satisfaction. The use of purposive sampling and a single-center setting may limit generalizability to the broader Bangladeshi population. Self-reported data are subject to social desirability and recall bias, particularly given cultural sensitivities surrounding sexual topics. Additionally, psychological, hormonal, and relational factors such as stress, mental health, or communication patterns were not comprehensively explored, which may influence sexual satisfaction outcomes.

CONCLUSION

This study demonstrates a clear inverse association between relationship duration and sexual satisfaction among Bangladeshi married adults, as measured by the Bangla NSSS-S. Couples in relationships of ≤ 5 years reported the highest levels of overall, individual, partner-related, and behavioral satisfaction, while those with > 15 years showed a marked decline. The validated Bangla NSSS-S exhibited excellent internal consistency, supporting its suitability for use in the Bangladeshi context. Additionally, marital satisfaction strongly influenced sexual satisfaction, underscoring the interplay between emotional and sexual well-being. These findings highlight the need for culturally sensitive couple-based interventions that promote communication, emotional intimacy, and adaptive strategies to sustain long-term sexual satisfaction in marital relationships.

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