



ORIGINAL ARTICLE

Factors associated with people's satisfaction with their sex life: a survey conducted in Kinshasa (Democratic Republic of Congo) during the COVID-19 pandemic

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Abstract

Background: COVID-19's restrictive measures have significantly affected our health, work and social relationships. As yet, less attention has been given to the changes in sex life.

Aim: This study investigates people's satisfaction with sex life in Kinshasa in the Democratic Republic of Congo (DRC).

Methods: A cross-sectional survey of the general population (18 years and over) was conducted, from 1st to 18th July 2020, in 17 municipalities in Kinshasa and several measures were used: Quality of life MANSA, EQ-5D-3L, UCLA Loneliness; PHQ-9; GAD-7. Prior to conducting data analysis, diagnostic tests for our data were performed to assess distribution, variance and multicollinearity. Descriptive statistics, bivariate correlation and multiple regression analysis were used.

Results: Sex life satisfaction increases from young adults aged 18-35 to those aged 36-55 and then there is a decrease from ages 56-69. After controlling for socio-demographic factors, sex life satisfaction was positively associated with the number and quality of people's friendships ($B=0.30$, $p=0.01$) and people's relationships with their families ($B=0.32$, $p=0.03$). People who feel lonely have lower sex life satisfaction ($B=-0.15$, $p=0.01$).

Conclusion: People's quality of their friendships and family relationships are important for their sexual well-being. Healthcare providers and policymakers should consider people's quality of friendships and family relationships when planning to improve the sexual well-being of people in DRC.

Keywords: Sex life satisfaction, sexual health, friendships, loneliness, anxiety and depression

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INTRODUCTION

The World Health Organization defined sexual health as a state of physical, emotional, mental and social well-being concerning sexuality. Sexual satisfaction is recognised as an essential part of sexual health, which has two components: physical and emotional (48). The physical component of sexual satisfaction refers to the level of fulfilment of the latest sexual act, the desirability of the time of day when sex happened and the degree of safety of the environment. For example, where sex partners have an ongoing conflict, they are unlikely to be satisfied with the sex. Emotional satisfaction is about the happiness and the comfort in having sex with the person, as well as the level of enjoyment and pleasure associated with the intercourse (35; 45). Satisfaction with sex life can be defined as a global evaluation by the person regarding his or her sex life (31). Sex life satisfaction refers to a judgmental process in which individuals assess the quality of their lives based on their own set of criteria (34). Previous studies have reported a relationship between sexual satisfaction and satisfaction with life as a whole. Also, sexual satisfaction is associated with people's health (39). For example, a study using a sample of 86 women aged 40-70 years old found that a higher level of well-being was associated with increased sexual satisfaction (9).

Several models/theories have tried to explain sexual satisfaction and gender differences. The ecological model of sexual satisfaction suggests that sexual satisfaction can be affected by individual or relational characteristics, as well as variables such as social support (16). A study conducted among lesbian/bisexual and heterosexual women found that depressive symptoms, internalized homophobia (in lesbians), satisfaction with the relationship, sexual functioning and social support were variables associated with sexual satisfaction (16). Some studies have reported that men are more satisfied with sex than women (6; 25). Social structure theory suggests that heterosexual men are more powerful in society; they are in a position to expropriate female sexuality for their own purposes without concern for women's satisfaction (10). Thus, better living conditions, better health care and more free time to engage in sexual

pursuits may support the social structure theory since higher-status individuals can trade their income for erotic capital which may influence their sex life satisfaction. This gendered sexual culture may play a role in widening the gap between male and female sexual satisfaction. In contrast, the gender similarities hypothesis suggests that men and women are similar in terms of most psychological factors such as sexual behaviour, desire and satisfaction (17).

However, despite the importance of sexual satisfaction, there is a lack of theoretical models combining the most important factors to explain sexual satisfaction in the African population (39). Moreover, less attention has been given to the changes in the sex life of Africans during the COVID-19 pandemic.

Sex life is influenced by the interaction of several factors including reproductive health, marital, emotional, social, economic, cultural, historical and religious status (31). Sexual health contributes to people's overall sense of well-being and health (48). A positive association has been reported between sex life satisfaction and factors such as sexual desire, better sleep, friendships, marriage stability and high reward for effort (26; 27). For example, a study using the World Gallup Poll conducted in sub-Saharan African nations found that those who were married (or who had partners) have higher sexual satisfaction than those who are not married (6). Moreover, sex life satisfaction has been linked with affectionate communication. When the communication is loving, it will create a healthy, friendly environment and positive relational behaviour (44). In contrast, some factors have contributed negatively to people's sex life such as sexual abuse (12), loneliness (26), illnesses such as breast cancer (38), or patients' pain (51). However, encouragement and reward play a positive role in sex life satisfaction. A study investigating the relationship between work stress and sex

Supplementary information The online version of this article ([Tables/Figures](#)) contains supplementary material, which is available to authorized users.

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life satisfaction among nurses found that, no matter whether job stress was high or low, receiving a higher reward for the effort led to better sex life satisfaction (27).

While a healthy friendly environment and positive relational behaviour can improve sex life satisfaction (44), adverse events such as illness, depression and sexual abuse have been negatively associated with sex life satisfaction (38).

COVID-19's restrictive measures have significantly affected our health, work and social relationships (1; 47). As yet, little is known about how the COVID-19 pandemic has affected the sex life satisfaction of Congolese people. The first confirmed COVID-19 case was announced on 10th March 2020 and, within two weeks, a state of emergency was declared (30). Several measures were imposed including travel bans, lockdowns, widespread testing, quarantine, regular hand washing, wearing masks, refraining from shaking hands when greeting, meetings restricted to no more than 20 people and social distancing. On 26th August 2020, the DRC reported 9,891 COVID-19 cases and 251 deaths, with the capital city Kinshasa being the epicentre and Gombe commune (the administrative and commercial centre of Kinshasa) the hotspot area (30).

Measures of sex satisfaction

Previous studies have reported different measures of sex satisfaction: (1) the modified version of Cantril Ladder, (2) the Global Study of Sexual Attitudes and Beliefs (GSSAB), (3) the Satisfaction with Sex Life Scale (SWLS) and (4) the Manchester Short Assessment of Quality of Life (MANSA).

The Cantril Ladder measure is often used to measure subjective well-being (42) and has been used to explore sex life satisfaction. This measure has been used to explore sex life satisfaction in Africa (6). The GSSAB has been used in a cross-sectional study of subjective sexual well-being among older women and men (25). The SWLS has been used to examine sex life satisfaction across the adult life span using Likert scale statements such as "I am satisfied with my sex life" and "In most ways, my sex life is close to my ideal" (31). MANSA has been used to assess people's quality of life and the self-report includes a question about satisfaction with sex life, "How

satisfied are you with your sex life?", with the answer scored from 1 (very dissatisfied) to 7 (very satisfied). MANSA is reliable and has been used to assess the quality of life of people with different conditions including those with mental health conditions (3; 36).

Although there has been a rapid growth of literature on different aspects of quality of life, subjective well-being (8) and sexual satisfaction (39), only a few studies have been published on sex life satisfaction in sub-Saharan Africa (6). Several reasons may explain this significant gap in the literature.

Firstly, the majority of studies looking at sex life satisfaction are conducted in developed nations because these countries have the financial resources to conduct research and participants are accessible, in contrast to developing nations with poorer infrastructure. For example, an interesting study investigating the "world's views on sexual well-being" did not include a single country from sub-Saharan Africa (25). This poses a problem when it comes to comparison and finding patterns and representativeness for the ultimate purpose of global decision-making (6).

Secondly, until now, most studies related to sexual habits in Africa have concentrated on the prevention of HIV/AIDS (23). This study however is one of the first to focus on sexual satisfaction, bringing a new perspective to this field.

Thirdly, in most sub-Saharan African countries, parent-child communication on sexual topics is taboo, as these conversations are perceived by some adults as an invitation for children to engage in sexual life. Nevertheless, studies have shown that there is a desire to create a space that is characterised by consultation, listening and dialogue in which adults and children would be able to participate in sex life education (5).

Only a few studies have investigated the impact of COVID-19 pandemic on sexual health and behaviours (2; 37); and some have found no substantial difference between sexual activity before and during the lockdown period of the COVID-19 pandemic (50). Major limitations are that most of these studies collected their data online through social media, owing to social restrictions. In addition, most of them were conducted in developed countries due to their financial resources and, in Asia, because of the origin

of the COVID-19 pandemic.

One study conducted in Kenya about the effect of COVID-19 on sexual satisfaction among married couples found a decrease in sexual satisfaction from before COVID-19 to during the pandemic (33). Less attention has been given to sub-Saharan African nations when it comes to sex life satisfaction. Moreover, no study has investigated the sex life in DRC during the COVID-19 pandemic and none has looked at the factors that may affect the satisfaction of sex life of people during the pandemic.

Aim of the study

This study investigates the satisfaction with the sex life of Congolese people during the pandemic and whether there are factors associated with people's satisfaction with their sex life.

This study aims to pursue the following objectives:

How satisfied are Congolese people with their sex life in the context of the COVID-19 pandemic?

Whether factors such as friendship, living conditions, family, leisure activities and health status are associated with people's satisfaction with sex life?

MATERIALS AND METHODS

Study design and participants

A cross-sectional survey was conducted in the city of Kinshasa, which is the capital of DRC. Kinshasa is now a megacity with an estimated population of more than 11 million.

From 1st to 18th July 2020, participants were recruited in the general population in 17 areas (municipalities) in the capital: Ngaliema, Mont Ngafula, Ngiri-Ngiri, Bumbu, Kitambo, Bandalungwa, Lemba, Matete, Selembao, Kalamu, Kasavubu, N'sele, Lingwala, Masina, Kinshasa, and Makala.

We used convenience sampling to recruit participants. In order to reduce bias, participants were recruited across 17 municipalities (of 24 municipalities) that cover the capital Kinshasa. The research team was asked to recruit 10 participants in each municipality to make a total of 170 participants. Unfortunately, due to COVID-19's restrictive measures, only 100 participants were eligible and included

in the final sample. Participants were identified by fieldworkers (research team) who were trained about how to be involved in the study and how to recruit participants within the context of social restrictions because of rapid person-to-person transmission of COVID-19. Participants were recruited from several places including community centres, churches, universities, and businesses. We have to highlight that only a gathering of 20 people was allowed to prevent the spread of COVID-19. Thus, face-to-face interviews were allowed when participants were wearing masks and respecting social distancing.

Inclusion criteria

- 18 years and over from the general population including people with mental conditions
- Capacity to provide informed consent
- Ability to communicate

Exclusion criteria

- Does not meet inclusion criteria such as not being 18 years old
- No capacity to provide informed consent such as people with cognitive impairment or with a diagnosis of substance use disorders.

Consent

Different groups or communities were informed about the study using posters or via their weekly meetings. Those who are interested were identified by members of their wider community or team leader. They were allowed to contact fieldworkers or the main office. The fieldworker designated for that area was informed and given the information sheet. Informed consent was obtained from eligible participants to participate in this study.

Ethics Committee approval

The Université Chrétienne de Kinshasa UCKIN Ethics Committee approved the study. All participants were given the information sheet about the survey and methods used to protect participants' data and the confidentiality of participants. Written

informed consent was obtained from all participants (see informed consent in Appendix 1).

Survey procedures and measures

The survey took place in quiet rooms in different locations and was conducted by the fieldworker who completed a questionnaire form by recording participants' responses. The survey's original language was English but participants in DRC do speak French. Thus, a certified translation service was used to translate the questionnaire from the English language to the French language; and then translated back from the French language to the English language. To check the accuracy, an independent translator (who has no contact with the original text) was used to translate it back into the original language. The survey includes questions about the number and quality of social contacts on each day of the previous week (13); Time Use Survey (TUS) (24); Health status EQ-5D-3L (11); UCLA Loneliness Scale (49); Patient Health Questionnaire (PHQ-9) (39); Generalised Anxiety Disorder (GAD-7) (40); MANSA Manchester Short Assessment of quality of life (3; 36). The MANSA includes questions related to people's satisfaction with their lives, job, financial situation, friendships, family relationships, sex lives, physical and mental health. Among the measures used, for example, the Social Contacts Assessment (SCA) was used for participants to report the number of social contacts in the previous week. Participants were asked to self-report their health status on a scale from zero to 100 if zero represents the worst health they can imagine and 100 represents the best health. The loneliness UCLA scale assesses the lack of companionship when people feel left out, feel isolated from others, when they do not have anyone to turn to or when they feel that people are around them but not with them. Each loneliness item is a rating from 1-4 if 1 = never, 2 = rarely, 3 = sometimes, 4 = always. The PHQ-9 looks at the depressive symptoms such as having little interest or pleasure in doing things, feeling down or hopeless... Each item ranges from 0 to 3, if 0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day. The overall scores then range from 0 to 4 (none), 5 to 9 (mild), 10 to 14 (moderate), 15 to 19 (moderately severe), and 20 to 27 (severe). The GAD-7 helps us to assess people's anxiety symptoms

such as feeling nervous, anxious.... GAD-7 scale has been used widely (43) to measure the severity of anxiety by asking 7 questions, each marked on a scale of 0–3. Responses are recorded as 0 (not at all), 1 (several days), 2 (more than half of the days), 3 (nearly every day). The overall scores then range from 5 to 9 (mild anxiety), 10 to 14 (moderate anxiety), 15 and above (severe anxiety). Also, participants reported "satisfaction with their sex life". The satisfaction with sex life was measured using the sixteen items of the Manchester Short Assessment of Quality of Life (MANSA), which was rated on a score from 1 (very dissatisfied) to 7 (very satisfied). The question was "How satisfied are you with your sex life?". Alongside the satisfaction with sex life question, other similar questions were asked to know people's satisfaction with their "life as a whole", "job", "financial situation", "number and quality of their friendships", "leisure activities", "accommodation", "personal safety", "people they live with", "family relationship", "physical health", and their "mental health". MANSA is a reliable measure and has been used to assess the quality of life of people with mental health conditions (3; 36). Two direct COVID-19-related questions were asked to participants to know how the coronavirus pandemic affected the amount of contact they have with people outside of their homes. Also, whether they feel that their mental health has changed since the coronavirus outbreak. Moreover, the questionnaire collected additional information such as participants' gender, age groups, marital status, living situation, education level, and employment. A dummy variable was created for socio-economic factors (e.g. 1 = female and 0 = otherwise; 1 = married and 0 = otherwise; 1 = unemployed and 0 = otherwise). This was a one-off survey that took approximately 45 minutes to complete.

Analyses

The analyses were conducted using Stata v. 17 (21). We conducted:

- Descriptive statistics
- Correlation between satisfaction with sex life and other factors such as social relationships, living situation, leisure activities, loneliness, anxiety, depression during COVID-19.

- Multiple regression analyses

Descriptive statistics (i.e., Mean and Standard Deviation) were reported for the satisfaction with sex life, and other related questions used in this study such as friendships, self-reported health status, social contacts, leisure activities, sports activities, loneliness, PHQ-9, and GAS-7 questions. We looked at the socio-demographic factors by gender and age groups.

Prior to conducting multiple regression analysis, diagnostic tests for our data were performed to assess distribution, variance and multicollinearity, demonstrating that none of the assumptions for using parametric tests had been violated. For example, we conducted Pearson correlation to determine the existence of the relationship between satisfaction with sex life and each other variable of interest. In the regression analysis, we had satisfaction with sex life as the outcome variable and social contacts, job satisfaction, living condition, friendships, and other factors as the main independent variables. We had socio-demographic factors as control variables. The correlations pairwise and regression analysis were set at a significance level of $p < 0.05$.

RESULTS

Descriptive statistics

Table 1 presents the descriptive statistics. Of 100 participants, 41% were females and 58 were males; 1% preferred not to disclose their gender. All participants were Congolese. Most of the participants (42%) were young adults (18-35 years old); followed by 37% of adults (36-55 years old). Those who were aged between 56-69 years old formed 15% of the sample. The smallest percentage (6%) was formed from those who were 70 and over. The number of participants by age group is the correct representation of the Congolese population where the population is younger and life expectancy is 63.2 years for females and 60.0 years for males. The majority of participants 65% had more than secondary education and 26% had secondary education as their highest level of education. Most participants were married

(47%), followed by those who were single (33%). Of 100 participants, 59% were living in independent accommodation (owner or renting) and 35% were in supported accommodation (can't afford to pay the rent). Most participants lived with their partner or family (76%) versus 17% who lived alone. The remaining 7% of the participants lived with friends or in shared accommodation. The majority of participants (49%) were in employment (full-time 35% and part-time 14%); 22% were unemployed and 12% were students.

The satisfaction with sex life: The average satisfaction with sex life was $M=4.38$ ($SD=0.19$) on a scale of 1 to 7 if 1 = couldn't be worse, and 7 = couldn't be better. The average sex life satisfaction amongst females was slightly less $M=4.04$ ($SD=0.34$) compared to males $M=4.67$ ($SD=0.22$). Across the age groups, the sex life satisfaction slightly increased and then decreased with the age of the participants: from young adults aged 18-35 ($M=3.83$) to those aged 36-55 ($M=5.02$) and then decreased for participants aged 56-69 ($M=4.2$); and slightly increased amongst those who were 70+ ($M=4.66$) (see Table 2). We found a similar trend in participants' satisfaction with their physical health. For other factors, see Table 2. Loneliness scale was higher ($M=17.12$, $SD=0.41$) and it decreased from young adults 18-35 ($M=17.30$, $SD=0.66$) to those aged 36-55 ($M=16.54$, $SD=0.60$) and then increased for people aged 56-69 ($M=18.33$, $SD=1.11$). The depression and anxiety levels were moderate ($M=9.17$, $SD=0.68$; $M=8.50$, $SD=0.61$ respectively). The depression score increased from mild amongst young adults 18-35 ($M=8.09$, $SD=0.92$) to ages 36-55 ($M=10.29$, $SD=1.21$), then decreased to moderate at aged 56-69 ($M=9.46$, $SD=1.89$) and aged over the 70s ($M=9.0$, $SD=3.24$). The anxiety score was moderate across age groups: age 18-35 ($M=8.57$, $SD=0.92$), 36-55 ($M=8.43$, $SD=1.0$), 56-69 ($M=8.93$, $SD=1.86$), and over 70s ($M=7.33$, $SD=2.53$).

Correlation

The sex life satisfaction was positively corrected with several factors: job satisfaction ($b=0.23$, $p=0.01$), satisfaction with the number and quality of the friendships ($b=0.24$, $p=0.01$), Satisfaction with

people you live with ($b = 0.22$, $p = 0.02$), Satisfaction with family relationships ($b = 0.20$, $p = 0.03$). In contrast, satisfaction with sex life was negatively associated with Loneliness scale ($b = -0.17$, $p = 0.07$) (see Table 3).

Multiple regression analysis

Table 4 presents the relationship between sex life satisfaction and several factors. After controlling for socio-demographic factors, sex life satisfaction was positively associated with satisfaction with the number and quality of people's friendships ($B = 0.29$, $p = 0.02$). Also, satisfaction with sex life was positively linked with satisfaction with people's relationship with their family ($B = 0.32$, $p = 0.03$). In contrast, sex life satisfaction was negatively associated with Loneliness ($B = -0.15$, $p = 0.01$), and young adult age group ($B = -1.15$, $p = 0.007$). All other factors were not significant (see Table 4).

DISCUSSION

This study looked at factors associated with sex life satisfaction. During the COVID-19's restrictions period, sex life satisfaction was positively associated with the number and quality of people's friendships. Also, satisfaction with the family relationship was positively linked with sex life satisfaction. In contrast, loneliness was negatively associated with satisfaction with sex life.

Sex life satisfaction has been positively associated with a happy marriage, happiness, and good health (28; 46). A study using data from a nationally representative sample of married couples ($N = 1,368$) between the ages of 18 and 45 found that a positive environment such as joint religious activities done in the home was positively associated with sexual satisfaction (7). Our research found that both men and women were satisfied with their sex life. In line with a previous study conducted in 31 sub-Saharan African countries (6), the average satisfaction with sex life was above the midpoint $M = 4.38$ ($SD = 0.19$) on a scale of 1 to 7 if 1 = couldn't be worse, and 7 = couldn't be better. But the average sex life satisfaction amongst females was slightly less $M = 4.04$ ($SD = 0.34$) compared to males $M = 4.67$

($SD = 0.22$). In line with a previous study, Cranney's study using the World Gallup Poll in 31 sub-Saharan African countries found that on average and across countries people were satisfied with their sex lives, with females' sex satisfaction slightly less than their counterpart males' participants (6).

Our findings are in line with previous studies conducted in 29 countries, $N = 27,500$ men and women aged 40-80 years (25). Laumann and colleagues' study found that men were more likely than women to report a higher subjective sexual well-being, regardless of sociocultural context (25), and another study found that men were sexually active (28). However, further study is needed to understand gender differences and whether sexual abuse and sexual coercion victimization could be one of the factors associated with less sex life satisfaction amongst women (14; 32).

Our study found an increase in sex life satisfaction from young adults aged 18-35 to those aged 36-55 and then a decrease for participants aged 56-69. And a similar trend has been found with participants' physical health dissatisfaction. These findings are in line with previous studies suggesting an increase in sex life satisfaction and then a decrease due to poorer physical health among men and women (19). Both men and women in very good or excellent health were 1.5 to 1.8 times more likely to report an interest in sex than those in poorer health conditions (19; 28). Our findings are in line with previous research suggesting that participants who rated their health as being good also gave their sex lives better ratings (25).

Previous studies have reported that those who have the best relationships with their family and with their friends are most satisfied with their life (18). Communicating affection is important for developing and maintaining friendships. Sex life satisfaction depends on many factors including a friendly family environment and affectionate communication. When the communication is loving it will create a healthy friendly environment and positive relational behaviour (44). Our study found a positive relationship between sex life satisfaction and satisfaction with the number and quality of participants' friendships. In line with previous studies, sex life satisfaction is based on friendships and social support. Social

support is characterised by affective support such as love, liking, and mutual respect. This may explain why verbal and physical abuse has a negative effect on sex life satisfaction (20). For example, victims of intimate sexual abuse have reported having more marital conflicts, insecure attachment, dysfunctional coping strategies, and less sexual satisfaction than non-abused women (12). To improve sex life satisfaction, researchers and policymakers may look at factors that contribute to people's overall sense of well-being and social relationships (7; 28; 48).

This study found a negative relationship between loneliness and sex life satisfaction. Loneliness is defined as the perception of inadequate social relationships (15). The work conducted by Hawkley & Cacioppo (2010) may explain why loneliness is negatively associated with sex life satisfaction. Sex life and loneliness are emotional and social constructs. It can be emotional by describing a gap between the desired and obtained intimacy. Also, it involves social relationships. This may explain why sex life satisfaction was positively associated with the number and quality of people's friendships. In contrast, COVID-19's restrictive measures such as travel bans, lockdowns, widespread testing, quarantine, regular hand washing, wearing masks, not shaking hands when greeting, meeting up to 20 people, and social distancing have affected Congolese social relationships. Previous studies suggest that poorer friendships, and insecure attachment may create loneliness and, as a result, dissatisfaction in sex life (12; 20).

CONCLUSIONS

During the COVID-19 restrictions period, those who had a good relationship with their family were more satisfied with their sex life. Also, the number and quality of people's friendships were positively associated with their sex life satisfaction. In contrast, people who feel lonely have lower sex life satisfaction. Healthcare providers and policymakers should consider people's quality of their friendships and family relationships when they are planning to improve the sexual well-being of people in DRC.

Strengths and limitations

This study has several strengths. First, this is the first cross-sectional study investigating factors associated with sex life satisfaction in DRC. Sex life research could be a taboo in the sub-Saharan African culture and may be avoided. We are pleased to see that participants voluntarily agreed to answer the question related to their satisfaction with sex life. This is encouraging. Research in sub-Saharan Africa is encouraged and can provide a useful point of comparison for patterns and relations found in developed-world contexts (6; 25).

Second, this study addresses the global health challenge and the existence of a huge treatment gap between developed countries and low-income countries. The WHO is encouraging research in sexual health and the dissemination of scientific evidence-based interventions (4; 29; 47; 48).

Nevertheless, it is important to recognise a few key limitations in this study.

First, the small number of participants may affect the outcomes of this study. Our sample is formed of 17 municipalities in Kinshasa but is stills not representative.

Second, this is a cross-sectional study and no causal relationship has been investigated. Thus, longitudinal studies are needed.

INFORMATION

Authors' contributions: All the authors made a substantive intellectual contribution, performed part of the experiments. All the authors have read and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

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Table 1. Descriptive statistics: Socio-demographic information.

Socio-demographic variables	N (%)
Gender	
Female	41 (41)
Male	58 (58)
Transgender	0
Prefer not to say	1 (1)
Age groups	
18-35	42 (42)
36-55	37 (37)
56-69	15 (15)
70+	6 (6)
Education	
Primary	5 (5)
Secondary	26 (26)
Tertiary/Further	65 (65)
Other general	4 (4)
Marital status	
Single	33 (33)
Married	47 (47)
Cohab/civil partner	4 (4)
Separated	3 (3)
Divorced	5 (5)
Widow/Widower	7 (7)
Not known/Missing	1 (1)
Accommodation	
Independent accom.	59 (59)
Supported accom.	35 (35)
Homeless/Roofless	1 (1)
Other accommod.	4 (4)
Living condition	
Living alone	17 (17)
Living with a partner or family	76 (76)
Living with friend(s)	5 (5)
Living in a shared accom.	2 (2)
Employment	
Full-time or self-empl	35 (35)
Part-time or self-empl	14 (14)
Voluntary employ.	3 (3)
Unemployment	22 (22)
Student	6 (6)
Housewife/husband	8 (8)
Retired	9 (9)
Other	6 (6)

Table 2. Descriptive statistics of satisfaction with sex life and other key factors.

Variables	All		Females		Males		Age 18-35		Age 36-55		Age 56-69		Age 70+	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Sex life Satisfaction (from 1 to 7)	4.38	.19	4.04	.34	4.67	.22	3.83	.30	5.02	.29	4.2	.55	4.66	.80
Life as a whole Satisfaction (1-7)	3.8	.17	3.48	.28	4.05	.21	3.83	.25	3.70	.29	3.86	.45	4	.89
Job satisfaction (1-7)	3.3	.21	2.70	.32	3.74	.28	2.92	.31	3.35	.36	3.73	.58	4.5	.80
Satisfaction with Financial situation (1-7)	3	.16	3.07	.25	2.98	.22	3.07	.25	2.48	.24	3.6	.45	4.16	.74
Satisfaction with Friendships (1-7)	4.01	.20	3.90	.34	4.10	.25	4.35	.27	3.94	.32	3.66	.66	2.83	1.07
Satisfaction with Leisure activities (1-7)	4.21	.18	3.97	.30	4.37	.22	4.42	.27	4.16	.29	3.13	.41	5.66	.71
Satisfaction with accommodation (1-7)	4.6	.18	4.78	.27	4.48	.25	4.73	.25	4.02	.31	5.66	.43	4.5	.76
Satisfaction with personal safety (1-7)	4.38	.19	4.21	.29	4.55	.26	4.28	.27	4.32	.33	4.93	.58	4	1
Satisfaction with people you live with (1-7)	4.91	.16	5	.25	4.91	.20	4.92	.25	4.81	.29	5.06	.38	5	.51
Satisfaction with family relationship (1-7)	4.68	.16	4.70	.26	4.65	.21	4.90	.23	4.51	.27	4.33	.45	5	.68
Satisfaction with physical health (1-7)	4.92	.173	4.80	.29	4.96	.21	4.61	.24	5.27	.30	5.06	.511	4.5	.5
Satisfaction with mental health (1-7)	4.73	.19	4.48	.31	4.91	.25	4.40	.32	4.83	.30	5.2	.48	5.16	.74
Health status EQ-5D-5L (1-100)	68.02	1.44	67.56	2.34	68.56	1.85	67.19	2.54	67.83	2.10	70	3.90	70	2.88
Loneliness scale UCLA (sum of 8 items)	17.12	.41	17.04	.65	17.15	.54	17.30	.66	16.54	.60	18.33	1.11	16.33	2.21
Depression PHQ-9 (sum of 9 items)*	9.17	.68	8.95	.98	9.17	.94	8.09	.92	10.29	1.21	9.46	1.86	9	3.24
Anxiety GAD-7 (sum of 7 items)**	8.5	.61	9.19	.98	8.03	.80	8.57	.92	8.43	1.00	8.93	1.86	7.33	2.53

Table 3. Correlation between satisfaction with sex life and other key factors.

Variables	Bivariate correlation (r)	P-value
Satisfaction with sex life (from 1 to 7)	1.0000	
Satisfaction with life as a whole (1-7)	0.1004	0.3203
Job satisfaction (1-7)	0.2326**	0.0199
Satisfaction with financial situation (1-7)	0.1445	0.1516
Satisfaction with the number & quality of your friendships (1-7)	0.2402**	0.0161
Satisfaction with leisure activities (1-7)	0.1433	0.1550
Satisfaction with accommodation (1-7)	0.1463	0.1464
Satisfaction with personal safety (1-7)	0.0458	0.6511
Satisfaction with people you live with (1-7)	0.2258*	0.0239
Satisfaction with family relationships (1-7)	0.2096*	0.0364
Satisfaction with physical health (1-7)	0.1126	0.2645
Satisfaction with mental health (1-7)	0.1287	0.2018
Health status EQ-5D-5L (1-100)	0.0345	0.7330
Loneliness scale UCLA (sum of 8 items)	-0.1774	0.0774
Depression PHQ-9 (sum of 9 items)*	-0.0335	0.7406
Anxiety GAD-7 (sum of 7 items)**	0.0485	0.6320

Table 4. Multiple Regression looking at the relationship between satisfaction with sex life and others key variables.

Satisfaction with your sex life (DV)	Coefficient	Std. err.	P value	[95% conf.interval]	
Satisfaction with life as a whole today	-.1078366	.1341808	0.424	-.3750246	.1593514
Job satisfaction	.1688499	.1026839	0.104	-.0356199	.3733198
Satisfaction with financial situation	-.0562557	.1417608	0.693	-.3385375	.2260261
Satisfaction with number & quality of your friendships	.303123**	.1141211	0.010	.0758789	.5303671
Satisfaction with leisure activities	.0245255	.1084294	0.822	-.191385	.2404359
Satisfaction with accommodation	.1322089	.1150413	0.254	-.0968675	.3612853
Satisfaction with personal safety	-.1371737	.1081877	0.209	-.3526028	.0782555
Satisfaction with people you live with	.2083836	.1245927	0.098	-.0397122	.4564793
Satisfaction with family relationship	.3297626*	.1554955	0.037	.0201315	.6393938
Satisfaction with physical health	-.2742985	.1498551	0.071	-.5726981	.0241012
Satisfaction with mental health	-.1164124	.1183928	0.329	-.3521626	.1193378
Health status EQ-5D-5L	-.0023869	.0155593	0.878	-.0333693	.0285956
Loneliness scale UCLA	-.1526351**	.0612714	0.015	-.2746421	-.0306281
Depression PHQ-9	.0447472	.0413649	0.283	-.0376208	.1271152
Anxiety GAS-7	.0177328	.0407948	0.665	-.0635001	.0989656
Gender female	-.6380066	.398362	0.113	-1.431247	.1552335
Age group 18-35	-1.154285**	.419082	0.007	-1.988784	-.319786
Marital status -married	.514128	.5179659	0.324	-.5172739	1.54553
Education up to secondary	-.0841432	.4458861	0.851	-.9720159	.8037295
Independent accommodation	.2500867	.4927675	0.613	-.7311388	1.231312
Living alone	-.8269314	.5781789	0.157	-1.978233	.32437
Employment - unemployed	-.7267059	.4976862	0.148	-1.717726	.2643139
Constant	5.379065**	1.690063	0.002	2.01372	8.74441

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