

The Relationship between Physical Training Exercise and Sexual Satisfaction: The Case among Married Adult Gymnasium Users in Addis Ababa

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ABSTRACT

Back ground: A sense of enjoyment or satisfaction with one's sexual life is a highly personal sentiment greatly related to an individual's past sexual experiences, current expectations, and future aspirations. Sexual satisfaction has been shown to be related to the characteristics and behavior of the partner, emotions, and sexual behaviors as well as to social background factors. Study has found that there is a positive correlation between exercise and sexual satisfaction. Physical training exercise enhanced sexual encounters including frequency of intimate activities and increased percentages of pleasing orgasms. **Objective:** The main objective of this study was to determine the relationship between physical training exercise and sexual satisfaction among married adult gymnasium users in Addis Ababa of Ethiopia **Method:** A descriptive cross-sectional study was conducted from November to February 30, 2012/13 to assess the relationship between physical training exercise and sexual satisfaction among married adult gymnasium users. Six fitness centers were selected by purposive sampling technique then from the selected fitness centers married adults were selected by systematic sampling technique. Self administered questionnaire and anthropometric measurement were used to evaluate the relationship between physical training exercise and sexual satisfaction. The study was under go after the approval of Jimma Institutional Review Board (IRB) college of Natural science and received a support of letter. **Results:** Married adults participated in regular physical activity had an overall positive effect on sexual satisfaction during sexual activity ($M = 4.42$, $SD= 0.391$) than those did not participate in regular physical activity ($M = 3.90$, $SD= 0.506$) and married adults having normal weight had higher overall sexual satisfaction during sexual activity ($M=4.56$, $SD=0.280$) than obese ($M=4.02$, $SD=0.352$) and overweight participants ($M=4.13$, $SD=0.482$). However, married adult men had slightly equal overall sexual satisfaction during sexual activity ($M=4.29$, $SD=0.444$) with married adult women ($M=4.29$, $SD=0.435$) **Conclusion:** Married adults having normal weight were significantly more sexually satisfying than overweight and obese married adults. And married adult women were decreased their overall sexual satisfaction during sexual activity than married adult men. Furthermore, married adults participated in regular physical activity were increased their overall effect of sexual satisfaction than those did not participate in regular physical activity. Since physical training exercise may increase the level of overall sexual satisfaction, health professionals and fitness instructor could use the results of this current study to motivate married individuals to begin regular physical exercise program.

Key words: Sexual satisfaction, Physical Training Exercise, Married Adult and Gymnasium Users

INTRODUCTION

Sexual satisfaction is defined as the affective response arising from one's evaluation of his or her sexual relationship, including the perception that one's sexual needs are being met, fulfilling one's own and one's partner's expectations, and a positive evaluation of the overall sexual relationship (Offman & Mattheson, 2005).

Sexual satisfaction has been shown to be related to the characteristics and behavior of the partner, emotions, and sexual behaviors as well as to social background factors (Davidson *et al.* 1995). Sexual behaviors which seem to be connected to sexual satisfaction include frequent intercourse, genital sex, and orgasm (Sprecher & Cate,2004).

Physical training/exercise can enable adults to improve and maintain strength and agility, decreasing the risk of falling, and thereby allow older adults to continue living independently and experiencing a higher quality of life. Along with these benefits, physiological benefits of exercise include: increased stroke volume, increased blood flow and circulation, increased aerobic capacity, decreased stress and depression, decreased risk of injury, decreased fatigue, reduced chance of dying prematurely, reduced chance of developing diabetes/high blood pressure/colon cancer, helps build and maintain health bones, muscles and joints, and assists in weight control (CDC, 1999).

Another benefit of physical training is increasing sexual satisfaction. Research studies that have examined the relationship between exercise and physical sexual satisfaction have all concluded that physical exercise increases sexual satisfaction levels (White, 1990). White found that men who exercised regularly experienced enhanced sexual encounters including frequency of intimate activities, increased percentages of pleasing orgasms, and sufficient functioning during sex. In addition, women who reported a decrease in frequency of physical training throughout the five year period also had a decrease in sexual satisfaction levels (Gerber, Johnson, Bunn, & O'Brien, 2005). Other study indicated that females who began an exercise program revealed an increase in vaginal pulse amplitude and vaginal blood volume in both sexual functioning and sexually impaired women, suggesting that an increase in sympathetic nervous system arousal may produce the outcome of physiological responses in women (Meston & Gorzalka, 1996). Exercise training intensifies the sympathetic nervous system thus possibly enhancing sexual satisfaction and improves the sexual activity of the individuals.

The literature indicate that no extensive research has been performed that relates physical training to sexual satisfaction. So, this research is designed to examine the relationship between physical training and sexual satisfaction within married adults. By examining this relationship we would develop strategies to educate the married adult population regarding how to increasing the awareness about their sexual satisfaction and as a result of participation on physical exercise. Currently, no studies to date have explored the relationships b/n physical training and sexual satisfaction among married gymnasium users in Addis Ababa of Ethiopia. Therefore, this study can be a base line for other researchers who are interested to study in similar area. Determining the relationship b/n physical training and sexual satisfaction would be good for the intervention programs.

Research Hypotheses

1. Married adults' who have a low body mass index would inverse relationship in levels of sexual satisfaction with those who have high body mass index
2. Married adults' who exercise regularly would significantly higher levels of sexual satisfaction than those who do not exercise regularly
3. Married adult males would report significantly higher levels of sexual satisfaction than adult women

GENERAL OBJECTIVE

The main objective of this study was to determine the relationship between physical training and sexual satisfaction among married adult gymnasium users in Addis Ababa of Ethiopia

SPECIFIC OBJECTIVE

1. To examine the relationship between gender and level of sexual satisfaction
2. To assess the association between level of sexual satisfaction and body mass index
3. To evaluate the relationship between level of sexual satisfaction and physical exercise status

RESEARCH METHODS AND MATERIALS

Study design and period

A descriptive cross-sectional study was conducted to determine the relationship between physical training and sexual satisfaction among married adult gymnasium users. The study was conducted from November to February 2012/13

Study population

All married adults participating in physical exercise program in the selected different fitness centers of Addis Ababa at the time of study. Adults participating in physical exercise program for two month and above were including in the study whereas individuals participating in exercise program below two month; being single; divorced and widowed were excluded from the study.

Sample size determination

In this study, sample size was determined using single population proportion formula. Taking the overall prevalence of 50 % to obtain the maximum sample size at 95 % certainty and a maximum discrepancy of +5% between the sample and the underlying population; an additional 10 % was added to the sample size as a contingency to increase power. Thus a minimum number of 403 married adult participants were required in the study.

This is the formula used to determine the sample size:

$$n = \frac{\left(Z \frac{\alpha}{2} \right)^2 \cdot p(1-p)}{d^2}$$

The level of confidence, $\alpha = 0.05$ (95%); $P = 50\% = 0.5$; $d2 =$ the degree of precision = 5%; Non response rate = 10%; $n = 384$; by adding non response rate 5%, $n = 384 + 19.2$; Total sample size = 403

Sampling Procedures

Out of the total fitness centers found in Addis Ababa six fitness centers were selected by purposive sampling technique namely Life Fitness Center; Yehilu Shawul Gymnasium; Africa Gymnasium; Alem Fitness Center; Meaza Gymnasium; and Abiy Gymnasium. From the selected fitness centers married adults were selected systematically. The selected married adults were subjected for the following data collection instruments:

Instrument Development and Data collection procedures

Data collection instrument and method used in the study was;

1. Level of Sexual Satisfaction Questionnaire: This is a 1-item subscale was used to measure the participants' level of sexual satisfaction. This subscale item was a modified version of sexual satisfaction from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants were asked 18 questions relevant to the current overall level of sexual satisfaction. This subscale has 18 items which was assessed an individual's level of sexual satisfaction by using a five-point Likert-scale. Each of the questions were responded to a scale of 1 to 5, individuals were score 5 for strongly satisfied, 4 for satisfied, 3 for neutral, 2 for dissatisfied and 1 for strongly dissatisfied. Individual item scores were totaled to achieve the overall level sexual satisfaction score, hence the higher score, the higher the level of sexual satisfaction.

2. Physical Activity Questionnaire: This is a 2-item scale was used to measure the participants' and partner current physical activity level. Participants were asked to estimate the frequency of his/her participation in physical activity during the past 7 days and an average week. Participants also asked to estimate the frequency of their partner participation in physical activity during the past 7 days and an average week. Based on frequency of participation in a week, participants were classified in to regular exercise group and non- regular exercise group. Regular exerciser group - participates in physical activity 3 or more times per week, at least 20 minutes each session that makes you sweat or breathe hard. Non- regular exerciser group - participates in physical activity 2 or less times per week, at least 20 minutes each session that makes you sweat or breathe hard (Godin & Shepard, 1985).

3. Weight and Height Measurement: Balanced beam scale was used to measure the weight of each study participant and the height of participants was measured with the measuring rod attached to the balanced beam scale. Each study participant's weight and height were measured to calculate their body mass index based on the procedures of WHO recommendation. Thus, underweight (BMI less than $18\text{kg}/\text{m}^2$); normal weight (BMI 18.55 to $24.99\text{kg}/\text{m}^2$); over weight (BMI 25- $29.99\text{kg}/\text{m}^2$); and obesity (BMI greater than $30\text{kg}/\text{m}^2$) were recorded and registered in the weight and height data recording form (Hanna T, Kari K & Tiina L., 2002).

Data quality Assurance

To assure the data quality, high emphasis were given in designing data collection instrument. For its simplicity, the questionnaire was pre-tested followed by slight modification. Training of data collectors and Supervisor were undertaken. The principal investigator and supervisor were made day to day site supervision during the whole period of data collection. At the end of each day, the questionnaires were reviewed and checked for completeness. Accuracy and consistency was checked by supervisor and investigator, and corrective discussion was undertaken with all the research team members.

Data processing and analysis

The data used for the statistical analysis was primary data. The responses from the survey were coded and entered into SPSS 23.0 version for statistical analysis. A series of means, standard deviations, and frequency analyzes were conducted on demographic variables and components of sexual satisfaction items. Independent samples t-tests were conducted to evaluate sex differences and physical exercise differences on sexual satisfaction. One way ANOVA were also carried to determine mean difference between body mass index status and sexual satisfaction. The statistical significance level was established at $p < 0.05$.

Ethical consideration

Ethical clearance was obtained from Jimma Institutional Review Board (IRB) college of Natural science and received a support of letter. Permission was obtained from Ethiopian sport commission. The purpose of the study was explained to study participants in order to get informed verbal consent. A written consent form was read to each respondent to obtain their agreement. Then an informed verbal consent was received from each study subjects and anyone who was not willing to take part in the study had the full right to do so. To ensure confidentiality of respondents, their names were not registered on the questionnaire.

RESULT

Socio-Demographic Characteristics of Married Participants

A total of 403 married adults completed the questionnaires, of which 1 response was excluded for gross incompleteness and in consistency of responses.

Analyses were made based on the 402 completed questionnaires, thus the response rate was 99.8%. Out of the respondents, 250 (62.2%) were males and 152 (37.8%) were females. The minimum age of the participant was 19 year and maximum was 58 year, with mean age and standard deviation of 36.07 ± 8.998 year. The minimum height and weight of the participants were 1.54m and 43kg and the maximum were 1.86m and 95kg, with mean height and weight of 1.7m and 69kg respectively. Most of the participant's participate in cardiovascular exercise were 351 (87.3%) while 51(12.7%) participate in strength exercise and no respondents were participated in flexibility exercise. Regarding sexual behavior, results indicated that 10 (2.5%) of participants' reported engaging in sexual activity at some point in their life but not within the past 30 days. One hundred forty one (35.1%) of participants' also reported engaging in sexual activity within the past 30 days. Two hundred fifty one (62.4%) of participants' reported engaging in sexual activity within the past 7 days. Regarding Body Mass Index of the

participants 38 (9.5%) were Obese, 115(28.5%) participants were overweight, 239 (59.5%) participants had normal weight and the remaining 20 (2.5%) participants were have underweight (**Table-1**).

Table 1 - Socio- demographic distribution of the married adults in the selected fitness centers of Addis Ababa from November to February 2012/13.

Category	Frequency (n=402)	Percent (%)
Age in years (Mean=36.07 ± 8.998)		
Gender		
Male	250	62.2%
Female	152	37.8%
Involvement in exercise		
Cardiovascular exercise	351	87.3%
Strength exercise	51	12.7%
Flexibility exercise	-	0.0%
Involvement in sexual activity		
Engaged in Sexual Activity at least once in lifetime but not within past 30 days	10	2.5%
Engaged in Sexual Activity within past 30 days	142	35.1%
Engaged in Sexual Activity within past 7 days	251	62.4%
Body Mass Index		
Underweight	20	2.5%
Normal weight	239	59.5%
Overweight	115	28.5%
Obesity	38	9.5%
Height in cm (Mean= 1.7m ±0.645)		
Weight in kg (Mean= 69kg ± 0.821)		

Sexual Satisfaction of Married Participants

The results, as indicated in Table Two, shown that married participants were enhance their level of sexual satisfaction during sexual activity with the ability of their partner's to move and change the position ($M=4.70$, $SD=0.495$), partner's physical strength ($M =4.61$, $SD=0.780$), overall satisfaction during sex ($M =4.41$, $SD=0.746$), physical strength ($M=4.76$, $SD=0.570$) and sexual desire ($M=4.90$, $SD=0.350$). Married participants reported decreased their level of sexual satisfaction with duration of sexual activity ($M =3.59$, $SD =1.181$), energy during sexual activity ($M =3.95$, $SD =0.751$), and self confidence to perform sex ($M =3.52$, $SD = 1.567$).

Five point Likert-like scale determine the overall level of sexual satisfaction scores ranged from 1 points (extremely dissatisfied during sexual activity) to 5 points (extremely sexual satisfied during sexual activity). Further analysis showed that, the overall mean score for sexual satisfaction was 4.29 ($SD= 0.440$). This indicated that, the level of sexual satisfaction is higher (increased) among married adult participants during sexual activity (**Table-2**).

Table 2 – Sexual satisfaction during sexual activity among married adults in the selected fitness Centers of Addis Ababa, from November to February 2012/13

Components of Sexual Satisfaction	Mean	Std. Deviation
Frequency of sexual activity	4.07	1.477
Duration of sexual activity	3.59	1.181
Current body image	4.24	1.316
Self-confidence to perform sex	3.52	1.567
Sexual desire	4.90	0.350
Physical flexibility during sexual activity	4.08	1.535
Physical strength during sexual activity	4.76	0.570
Ability to move and change positions during sex	4.01	0.788
Energy during sexual activity	3.95	0.751
Overall satisfaction with the sexual activity	4.90	0.364
Frequency of orgasms	4.40	1.083
Intensity of orgasms	4.61	0.488
Partner's Physical flexibility during sex	4.13	0.474
Partner's Physical strength during sex	4.61	0.780
Partner's ability to move and change positions	4.70	0.495
Partner's Energy during sexual activity	4.14	0.790
Partner's overall satisfaction with the sex	4.13	1.568
Partner's Frequency of orgasms	4.39	0.586
Level of sexual satisfaction score	77.13	16.163

Means based on a five point scale (1=extremely dissatisfied during sexual activity, 5=extremely satisfied during sexual activity)

Sexual Satisfaction based on Exercise Status among Married Participants

In order to assess the exercise differences on sexual satisfaction for each sexual relationship context, independent samples t-tests were used. As the result shows that, there were strong significant differences between the frequency of sexual activity ($t(400) = 17.228, p = 0.001$), such that it was found to be more in regular exercisers ($M = 4.64, SD = 0.846$) than non-regular exerciser groups ($M = 2.44, SD = 1.677$); duration of sexual activity ($t(400) = 12.384, p = 0.001$), such that it was found to be more in regular exercisers ($M = 3.96, SD = 0.683$) than non-regular exerciser groups ($M = 2.54, SD = 1.607$); current body image ($t(400) = 9.748, p = 0.000$), such that it was found to be more in regular exercisers ($M = 4.58, SD = 0.716$) than non-regular exerciser groups ($M = 3.27, SD = 1.991$); self-confidence to perform sex ($t(400) = 5.665, p = 0.001$), such that it was found to be more in regular exercisers ($M = 3.77, SD = 1.686$) than non-regular exerciser groups ($M = 2.80, SD = 0.805$); sexual desire ($t(400) = 4.990, p = 0.001$), such that it was found to be more in regular exercisers ($M = 4.95, SD = 0.242$) than non-regular exerciser groups ($M = 4.76, SD = 0.531$); physical flexibility during sexual activity ($t(400) = 18.784, p = 0.000$), such that it was found to be more in regular exercisers ($M = 4.70, SD = 0.515$) than non-regular exerciser groups ($M = 2.31, SD = 1.661$); physical strength during sexual activity ($t(400) = 2.957, p = 0.003$), such that it was found to be more in regular exercisers ($M = 4.81, SD = 0.515$) than non-regular exerciser groups ($M = 4.627, SD = 0.687$); frequency of orgasms ($t(400) = 15.126, p = 0.001$), such that it was found to be more in regular exercisers ($M = 4.79, SD = 0.624$) than non-regular exerciser groups ($M = 3.30, SD = 1.336$); and partner's overall satisfaction with the sex ($t(400) = -5.515, p = 0.001$) such that it was found to be less in regular exercisers ($M = 3.89, SD = 1.731$) than non-regular exerciser groups ($M = 4.36, SD = 0.505$). Therefore, regular exercise had an overall positive effect on sexual satisfaction during sexual activity among married adults participated in physical training

(Table-3).

Table 3 - Sexual satisfaction by physical exercise status among married adults in the selected fitness centers of Addis Ababa, from November to February 2012/13

Components of Sexual Satisfaction	Regular Exercise Group		Non- Regular Exercise Group		t	Sig. (2-tailed)
	M	SD	M	SD		
Frequency of sexual activity	4.64	.846	2.44	1.677	17.228	.000
Duration of sexual activity	3.96	.683	2.54	1.607	12.384	.000
Current body image	4.58	.716	3.27	1.991	9.748	.000
Self-confidence to perform sex	3.77	1.686	2.80	.805	5.665	.000
Sexual desire	4.95	.242	4.76	.531	4.990	.000
Physical flexibility during sexual activity	4.70	.857	2.31	1.661	18.784	.000
Physical strength during sexual activity	4.81	.515	4.62	.687	2.957	.003
Ability to change positions during sex	4.03	.791	3.95	.781	.910	.364
Energy during sexual activity	3.94	.748	3.98	.763	-.442	.659
Overall satisfaction with the sexual activity	4.93	.326	4.83	.450	2.489	.013
Frequency of orgasms	4.79	.624	3.30	1.336	15.126	.000
Intensity of orgasms	4.61	.489	4.62	.489	-.144	.886
Partner's Physical flexibility during sex	4.13	.488	4.12	.434	.171	.864
Partner's Physical strength during sex	4.60	.786	4.62	.767	-.128	.898
Partner's ability to move and change positions	4.68	.508	4.76	.451	-1.393	.164
Partner's Energy during sexual activity	4.14	.789	4.12	.797	.214	.830
Partner's overall satisfaction with the sex	3.89	1.731	4.84	.505	-5.515	.000
Partner's Frequency of orgasms	4.41	.586	4.36	.590	.752	.452

* Regular exerciser defined as an individual that participates in physical activity 3 or more times per week, at least 20 minutes each session that makes you sweat or breathe hard.

* Non- regular exerciser defined as an individual that participate in physical activity 2 or less times per week, at least 20 minutes each session that makes you sweat or breathe hard.

Sexual Satisfaction based on Body Mass Index among Married Participants

One way ANOVA were conducted to evaluate the differences between body mass index groups (obese, overweight, normal weight and underweight) on sexual satisfaction within each component of sexual relationship context. As can be seen from the Table four within components of sexual satisfaction, there were strong significant differences in the frequency of sexual activity $f(3) = 8.223, p=0.001$, duration of sexual activity $f(3) = 19.323, p=0.001$, current body image $f(3) = 6.361, p=0.001$, self-confidence to perform sex $f(3) = 41.795, p=0.001$, sexual desire $f(3) = 56.805, p=0.001$, physical flexibility during sexual activity $f(3) = 15.129, p=0.001$, physical strength during sexual activity $f(3)=82.609, p=0.001$, overall satisfaction with the sexual activity $f(3) = 36.412, p=0.001$, frequency of orgasms $f(3) =11.152, p=0.007$, partner's physical flexibility during sex $f(3) = 4.793, p=0.001$, partner's physical strength during sex $f(3) =12.703, p=0.000$, partner's ability to move and change positions $f(3) = 60.350, p=0.001$, and overall satisfaction with sex $f(3) =109.240, p= 0.005$, between Underweight and Normal weight and Overweight and Obese participants.

To identify differences between groups, Tukey post-hoc tests revealed that: Participants having normal weight had significantly more frequency of sexual activity; duration of sexual activity; current body image; self-confidence to perform sex and sexual desire than participants having underweight and obese and overweight participants. Obese participants had significantly less sexually satisfying regarding physical flexibility; physical strength; overall satisfaction and frequency of orgasms than overweight and normal weight participants and underweight. Participants having normal weight had significantly more partner's physical flexibility during sex; partner's physical strength during sex; partner's ability to move and change the positions and partner's overall satisfaction with sex than over weight and obese participants. Therefore, as Body Mass Index of an individual increased, the level sexual satisfaction during sexual activity decreased (**Table-4**).

Table 4 - Sexual satisfaction by body mass index among married adults in the selected fitness centers of Addis Ababa, from November to February 2012/13

Components of Sexual Satisfaction	<u>Obese</u>		<u>Overweight</u>		<u>Normal Weight</u>		<u>Underweight</u>		F	Sig.
	M	SD	M	SD	M	SD	M	SD		
Frequency of sexual activity	3.80	.632	3.85	1.782	4.63	.653	3.82	.652	8.223	.000
Duration of sexual activity	4.08	.623	3.24	1.319	4.16	.789	4.10	.876	19.323	.000
Current body image	4.20	.516	4.11	1.629	5.00	.000	5.00	.000	6.361	.000
Self-confidence to perform sex	3.80	.422	2.93	1.633	4.67	.953	3.66	.481	41.795	.000
Sexual desire	3.90	.738	4.61	.595	4.97	.192	4.95	.260	56.805	.000
Physical flexibility during sexual activity	4.10	.568	3.73	1.837	4.84	.451	4.03	.716	15.129	.000
Physical strength during sexual activity	3.90	.876	4.74	.563	4.95	.300	3.82	.652	82.609	.000
Ability to change positions during sex	4.10	.876	4.01	.783	4.02	.795	4.00	.805	.048	.986
Energy during sexual activity	4.20	.789	3.95	.757	3.94	.741	3.97	.753	.389	.761
Overall satisfaction with the sexual activity	4.42	.758	4.60	.516	4.99	.112	4.91	.364	36.412	.000
Frequency of orgasms	4.05	.837	4.23	1.275	4.87	.409	4.40	.516	11.152	.000
Intensity of orgasms	4.30	.483	4.62	.488	4.63	.486	4.61	.495	1.398	.243
Partner's Physical flexibility during sex	4.03	.182	4.25	.660	4.32	.775	4.60	.516	12.703	.000
Partner's Physical strength during sex	3.79	.963	3.90	.738	4.30	.946	4.92	.401	47.608	.000
Partner's ability to move and change positions	4.21	.528	4.40	.516	4.43	.578	4.92	.264	60.350	.000
Partner's Energy during sexual activity	4.50	.850	4.13	.788	4.12	.785	4.13	.811	.717	.542
Partner's overall satisfaction with the sex	2.47	1.889	4.70	.675	4.79	.713	4.84	.495	109.240	.000
Partner's Frequency of orgasms	4.50	.527	4.39	.583	4.39	.603	4.39	.595	.114	.952

Sexual Satisfaction based on Gender among Married Participants

To determine whether there were significant differences between men and women on each component sexual satisfaction assessed, a series of independent samples t-tests were conducted. As can be seen in the Table five, The most striking result to emerge from the data is that did not show any significant differences between men and women concerning frequency of sexual activity ($t(400) = .276, p = 0.783$), duration of sexual activity ($t(400) = -.208, p = 0.836$), self-confidence to perform sex ($t(400) = .067, p = 0.946$), sexually desirable ($t(400) = .368, p = 0.713$), current body image ($t(400) = .004, p = 0.997$), physical flexibility during sexual activity ($t(400) = -.344, p = 0.731$), physical strength during sexual activity ($t(400) = .531, p = 0.595$), ability to move and change positions ($t(400) = .377, p = 0.706$), partner's physical flexibility ($t(400) = -.208, p = 0.835$), partner's physical strength during sex ($t(400) = -.757, p = 0.450$), partner's ability to move and change positions ($t(400) = -.701, p = .484$), partner's overall satisfaction with the sex ($t(400) = -.391, p = 0.696$).

Men shows more sexually satisfying with frequency of sexual activity ($M=4.09, SD=1.486$), self-confidence to perform sex ($M=3.52, SD=1.583$), sex desirability ($M=4.91, SD=0.341$), Physical strength ($M=4.77, SD=0.576$) and ability to move and change positions ($M=4.02, SD=0.857$) than women ($M=4.05, SD=1.466$), ($M=3.51, SD=1.544$), ($M=4.89, SD=0.367$), ($M=4.74, SD= 0.561$), ($M=3.99, SD=0.785$) respectively. However, women finds more sexually satisfying with duration of sexual activity ($M=3.61, SD=1.152$), partner's physical flexibility during sex ($M=4.14, SD=0.461$), partner's physical strength during sex ($M=4.64, SD=0.722$), partner's ability to move and change positions ($M=4.72, SD=0.477$), and partner's overall satisfaction with the sex ($M=4.17, SD=1.556$) than man ($M=3.58, SD=1.201$), ($M=4.13, SD=0.482$), ($M=4.58, SD=0.813$), ($M=4.69, SD= 0.506$), ($M=4.11, SD=1.578$) respectively

(Table-5).

Table 5 - Sexual satisfaction by sex among married adults in the selected fitness centers of Addis Ababa, from November to February 2012/13

Components of Sexual Satisfaction	Men		Women		t	Sig. (2-tailed)
	M	SD	M	SD		
Frequency of sexual activity	4.09	1.486	4.05	1.466	.276	.783
Duration of sexual activity	3.58	1.201	3.61	1.152	-.208	.836
Current body image	4.24	1.296	4.24	1.352	.004	.997
Self-confidence to perform sex	3.52	1.583	3.51	1.544	.067	.946
Sexual desire	4.91	.341	4.89	.367	.368	.713
Physical flexibility during sexual activity	4.06	1.564	4.12	1.491	-.344	.731
Physical strength during sexual activity	4.77	.576	4.74	.561	.531	.595
Ability to change positions during sex	4.02	.791	3.99	.785	.377	.706
Energy during sexual activity	3.98	.760	3.91	.736	.796	.426
Overall satisfaction with the sexual activity	4.91	.363	4.89	.367	.354	.724
Frequency of orgasms	4.41	1.088	4.39	1.080	.214	.831
Intensity of orgasms	4.59	.493	4.64	.480	-1.130	.259
Partner's Physical flexibility during sex	4.13	.482	4.14	.461	-.208	.835
Partner's Physical strength during sex	4.58	.813	4.64	.722	-.757	.450
Partner's ability to move and change positions	4.69	.506	4.72	.477	-.701	.484
Partner's Energy during sexual activity	4.15	.792	4.12	.788	.413	.680
Partner's overall satisfaction with the sex	4.11	1.578	4.17	1.556	-.391	.696
Partner's Frequency of orgasms	4.40	.580	4.39	.599	.130	.897

DISCUSSION

SEXUAL SATISFACTION AND PHYSICAL EXERCISE

Supporting the hypothesis, the current study found that the overall levels of sexual satisfaction were higher during sexual activity among married adults who are exercised regularly than did not exercise regularly.

The findings of the current study are consistent with white et. al (1990) who found that the men who exercised regularly experienced enhanced sexual encounters including frequency of intimate activities, increased percentages of pleasing orgasms, and sufficient functioning during sex. In addition, women who reported a decrease in frequency of exercise throughout the five year period also had a decrease in sexual satisfaction scores (Gerber, Johnson, Bunn, & O'Brien, 2005). This may indicate that regular exercisers may experience physiological benefits that could enhance their physical sexual satisfaction such as increased blood flow, joint and muscular flexibility and skeletal muscular strength. The present findings corroborate the ideas of Mandall

(1979), who suggested that through increased skeletal muscle tone, orgasmic pleasure could be increased. Therefore, if an individual are trying to get or reach to increase their level of overall sexual satisfaction, a possible solution could be to exercise regularly.

SEXUAL SATISFACTION AND BODY MASS INDEX

Supporting the hypothesis, the present study found that the overall levels of sexual satisfaction higher among married adults having normal weight (adults' who have a low body mass index) as compared to overweight and obese married adults (adults' who have a high body mass index). This means as body mass index increases, sexual satisfaction decreases and as body mass index decreases, sexual satisfaction increases.

The present findings seem to be consistent with other research which found that individuals with a lower or average body mass index had higher levels of self-attractiveness (Haavio- Mannila & Purhonen, 2001). This may indicate that individuals with a lower or average body mass index feel more attractive and therefore have enhanced their overall levels of sexual satisfaction.

The current finding is in agreement with Gerber et. al (2005) findings which showed a positive correlation between an individual's body image and sexual satisfaction. An individual's body image could be impacted by their body mass index. In addition, study also indicates that increasing severity of obesity is associated with greater impairment in sexual quality of life or experience greater sexual difficulties (Kolotkin et. al.,2006). A possible explanation for this might be that, obesity similar to other cardiovascular risk factors is associated with the development of male and female sexual dysfunctions resulting from the deleterious effects on vascular and endothelial functions (Berman& Bassuk,2002). Therefore, individuals that are interested in possibly enhancing their sexual satisfaction should consider maintaining a low or average body mass index.

Sexual satisfaction and gender

The results of the current study did not support the hypothesis that Married adult males would significantly do not higher levels of sexual satisfaction than adult women. The most interesting finding was that the level of sexual satisfaction was nearly equal between married men and married women during sexual activity.

Even though no previous study has found a difference between male and female levels of sexual satisfaction, the current study has shown a relationship between gender and components of sexual satisfaction. Females in the current study had higher levels of sexual satisfaction regarding partner's physical flexibility during sex; partner's physical strength during sex; partner's ability to move and change positions; partner's overall satisfaction with the sex; duration of sexual activity; and physical flexibility during sexual activity. This may indicate that females are satisfied with their partner's role during sexual activity but not satisfied with their own performance during sexual activity. Several possible reasons for this might be due to gender socialization, each gender has different expectations regarding appropriate sexual behavior.

Study showed that women are more reserved in the culture and are less likely to discuss such sensitive subjects. Therefore, sexual satisfaction likely impact negatively (USDHS, 2000b). Performance anxiety is also believed to be the most common cause of orgasm problems (Medline Plus Medical Encyclopedia, 2004). It may also be noted that orgasmic females are often unable to reach climax due to premature ejaculation by the male (Wikipedia Encyclopedia, 2005). Therefore, it may be concluded that males are more satisfied with their orgasm frequency because they achieve an orgasm more often than females.

CONCLUSIONS

Married adults were most satisfied during sexual activity with the ability of their partner's to move and change the position, partner's physical strength , overall satisfaction during sex, physical strength and sexual desire to sex but least satisfied with duration of sexual activity , energy during sexual activity, and self confidence to perform sex. Married adults participated in regular physical activity had higher overall level of sexual satisfaction than those who did not exercise regularly. Moreover, Married adult males had nearly equal levels of level of sexual satisfaction with married adult females and Married adults having normal weight (low low body mass index) had higher level of sexual satisfaction than obese and overweight married adults (who have high body mass index).

Hence, the following specific recommendation has been made based on the finding of the study so as to give a clue about the possible direction to follow and focus to alleviate the existing problems of adherence. Effective information, education and communication strategies should be designed and strengthened to raise their awareness and modify or change their life style behavior, focusing on proper regular physical exercises. Awareness rising programmed should be arranged for further knowledge focusing on sexual satisfaction. In addition to this, arrange a regular physical exercise program for those who have high body mass index and as the same time to encourage them to practices physical exercise. Eventually, further research should be completed by using different sampling method and approach to confirm or reject the results of this descriptive study, and to advance the study findings.

Competing interests

The authors declare that they have no competing interests.

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