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Psycho-social determinants of sexual satisfaction in young, middle and late adulthood

Abstract

Numerous studies demonstrate that, regardless of the adulthood stage, sexual satisfaction is crucial to the general opinion on life quality. The models of sexual satisfaction presented in the subject literature display underlying differences in its determinants between men and women; little, however, is said about potential variations, which can occur at different stages in an adult's life. The results presented in our article are extensively researched fragments regarding the psycho-social determinants of sexual satisfaction, conducted on 90 women and 77 men, aged 21–72.

Our study attempted to determine the extent to which age affects:

- The sexual satisfaction level in women and men,
- The relationship between psycho-physical attractiveness, close relationship satisfaction, and intensification of sexual practices; with the level of sexual satisfaction for both women and men.

The assessment was based on original questionnaires as well as on the Intimacy, Passion and Commitment Questionnaires by Acker and Davis.

Neither age nor gender influenced the sexual satisfaction level. However, they both affected the relationship between sexual satisfaction and psychosocial variables.

Keywords:

sexual satisfaction, psycho-physical attractiveness, satisfaction with close relationship, sexual practices

Streszczenie

Liczne badania dowodzą, że satysfakcja seksualna jest ważna dla ogólnej oceny jakości życia na każdym etapie dorosłości. Modele satysfakcji seksualnej prezentowane w literaturze przedmiotu wskazują różnice w jej uwarunkowaniach pomiędzy kobietami i mężczyznami, niewiele jednak mówiąc o potencjalnych zmianach, mogących wystąpić na różnych etapach dorosłości. Prezentowane w artykule wyniki są fragmentem autorskich badań dotyczących psychospołecznych uwarunkowań satysfakcji seksualnej, przeprowadzonych na 90 kobietach i 77 mężczyznach w wieku 21–72 lata. Celem badania było ustalenie w jakim zakresie wiek różnicuje:

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- poziom satysfakcji seksualnej kobiet i mężczyzn,
- związek oceny atrakcyjności psychofizycznej własnej i partnera, zadowolenia z bliskiego związku, nasilenia ars amandi z poziomem satysfakcji seksualnej kobiet i mężczyzn.

W pomiarze wykorzystano autorskie kwestionariusze oraz Kwestionariusz Intymność, Namiętność, Zaangażowanie autorstwa Ackera i Davisa.

Wiek ani płeć nie różnicowały poziomu satysfakcji seksualnej. Różnicowały jednak siłę związków zadowolenia z życia seksualnego ze zmiennymi psychospołecznymi.

Słowa kluczowe:

satysfakcja seksualna, atrakcyjność psycho-fizyczna, satysfakcja z bliskiego związku, praktyki seksualne

Introduction

Sexuality is undeniably inscribed in human nature, and for most people sex plays an important role. Sexual practices may lead to many positive results; including being the source of positive emotions. Sexuality aspect is closely related to the quality of life and its appreciation (Rosen, Bachmann, 2008; Bancroft, 2009; Dolińska-Zygmunt, Nomejko, 2012; Kuczyńska, 1998). Due to its subjective character, sexual satisfaction is a term quite difficult to operationalize. Sexuality itself is defined as an aspect of the human condition manifesting itself in lust or desire, and the accompanying, physiologically determined, sexual responses and behaviors, leading to orgasm or, at least a pleasurable state of arousal, occurring often between two people, yet not infrequently practiced alone (Bancroft, 2011, p. 19).

Sexual satisfaction is defined as:

- An emotional response to a subjective evaluation of positive and negative aspects, related to sexual life (Lawrance, Byers, 1995);
- A highly personalized feeling, relating strongly to past sexual experiences, present expectations and future aspirations (Davidson, 1995, after: Haavio-Mannila, Kontula, 1997);
- A personal, subjective evaluation of one's own sexual relations (Ji, Norling, 2004);
- A subjective evaluation at the level n which an individual is satisfied with their sexual life (Pinney, Gerrard, 1987, after: Holt, Lynes, 2007).

The definitions mentioned above accentuate sexual satisfaction's subjective dimension and its cognitive and/or emotional evaluation. The definition of satisfaction, adopted for the purposes of this article, is closest in definition to that formulated by Pinney and Gerard. Sexual satisfaction is, in their light, understood as a cognitive-emotional evaluation of the sex life satisfaction level.

Models of sexual satisfaction determinants

Reaching sexual satisfaction depends on many factors, which may often be non-sexual in character. According to Lew-Starowicz (1997, 2010) the level reached is influenced by biological, psychic and socio-cultural factors. Amongst the biological factors Lew-Starowicz mentions genetics, hormones, neurotransmitters, anatomy and sexual physiology. The psychological agents are psycho-sexual development, needs, expectations, attitudes, one's self perception, erotic creativity, personality, and partner relations. The socio-cultural category encompasses such notions as norms, education, fashion, stereotypes, gender roles, erotic art and pornography. Holt and Lyness (2007) suggest a concept, according to which sexual satisfaction is assessed sexual practices when viewed as desire and sexual functioning. Desire is defined as cognitive and affective interest in sexual activity with a particular individual and readiness for this activity. Sexual functioning is a biological component, which constitutes various stages of intercourse: lust, arousal and orgasm and their physiological manifestations. Davis (2006) suggests a ternary model in which global evaluation is affected by physical and emotional satisfaction, and satisfaction with control when and if sexual intercourse occurs. Haavio-Mannila and Kontula (1997), in their studies, have distinguished five key aspects crucial to a satisfying sex life:

- Social background: age, atmosphere surrounding sexuality and religion in the house where you were brought up, resources relating to education and when you had your first sexual experiences;
- Personal views related to sex: its importance against the importance of life's other aspects, sexual assertiveness, perception of own sexual skills, sexual activeness and attractiveness;
- Emotional ties between partners: being loved and loving one's partner;
- Sexual techniques and practices: using sex gadgets and materials, frequency of intercourse and multiple techniques and positions;
- Orgasm: frequency in completing intercourse with intense pleasure.

The American Center for Martial and Sexual Health (after: Leiblum, Rosen, 2005) portrays a model of sexual satisfaction which accentuates psycho-social factors. Sex life is always set in a context: the quality of close relationship, overall health, having children, professional satisfaction and stage in life. The elements mentioned above greatly determine the sexual relation and its satisfaction level.

Self-assessing psycho-physical attractiveness

Many other scientists emphasize the relation between self-esteem and the quality of sex life (Bancroft, 2009; Baumeister and others, 2003; Pujols and others, 2010; Izdebski, 2012). The sexual reaction model by Rosemary Basson (2000, 2005) stipulates that, high

self-esteem is an important psychological condition for reaching sexual satisfaction, and the need to maintain or raise this level of self-appraisal and attractiveness is a frequent (beyond-sexual) motif for engaging in sexual activity. Our own studies have also demonstrated a strong link between sexual satisfaction and self-esteem (Dolińska- Zygmunt, Nomejko, 2012). According to Gossmann and others (2003), people convinced of their sex appeal are more prone to initiate sexual practices and more satisfied with them. Meltzer and McNulty's studies (2010) also show that sexual attractiveness strongly correlates to the assessment of one's body, weight, and physical condition. Physical fitness, however, is greater in importance for men than women (Kedde, Berlo, 2006). The studies, conducted in American universities, indicate that amongst young men an important predicate of sexual satisfaction is their self-assessed musculature (Daniel, Bridges, 2012).

Evaluating the partner's psycho-physical attractiveness

An important element in evaluating a close relationship is to evaluate one's partner's attractiveness. Attractiveness plays a significant role, particularly, in the relationship's initial stage and it frequently determines whether it will continue. Men seek women who are younger and healthy (shiny hair, clear complexion, full lips, healthy teeth, shapely figure), and energetic (correct tonus, resilience, expressiveness); women tend to concentrate on a man's strength and wealth, and other characteristics which predispose men to provide resources in the future (ex. intelligence). The evolutionary concept of sexual satisfaction indicates that, especially in women, orgasm and satisfaction stemming from intercourse are signals for choosing the proper individual for mating and procreation (Buss, 2007). The partner's assessment of a woman's attractiveness is closely connected with how frequently there is sexual activity and sexual satisfaction, and how content his partner will be with marriage (Meltzer, McNulty, 2010). Studies by Nęcki (1990) prove that the relation between a partner's attractiveness and sexual satisfaction is positive in cases of men. When taking women into consideration, one notices that perceiving the partner as unattractive lowers sexual satisfaction. High evaluation of the partner does not, however, relate to high satisfaction from sexual practices. Women, in order to achieve high sexual satisfaction, need to feel certain about the way they are perceived by their partners (Davis, 2006).

Satisfaction with a close relationship

The importance of the bond between partners and satisfaction with the relationship that benefits a satisfactory sex life is also underlined by Kuczyńska (1992, 2001), Nęcki (1990), Gossmann and others, (2003), and Meltzer and McNulty, (2010). Satisfaction with the relationship is especially important for the woman's evaluation of sex life (Rosen, Bachmann, 2008); however, it also indirectly affects men. In a couple it is the woman who, most often, decides how frequent their sexual contacts will be, and they are

more frequent when the woman is satisfied with the entire relations with her partner. The Kinsey's Institute studies (after: Bancroft, 2009) show that the women's contentment with their sex life is greatly influenced when they are aware that their partners are being sexually satisfied and when they themselves are desired by their partner. In the studies conducted by Izdebski (2012) on a population of 2720 Poles, aged 18–49, sexual satisfaction correlates most intensively with their satisfaction in being in a close relationship.

Sexual practices

Sexual practices are an important element to determine sexual satisfaction. Even works of art originating before our era depict complex, rich sexual practices understood as a way to reach happiness (Lew-Starowicz, 1987). Likewise, contemporary sexology often concentrates on enriching sexual techniques. Studies show that satisfaction with intimate relations rises accordingly to the frequency of alterations in sexual practices (Burke, Yung, 2012). It is especially important for women (Kratochvil, 2002; Leiblum, Rosen, 2005). Females who are satisfied with their sex lives, when compared to the discontented ones, find the more sophisticated practices more pleasurable (Kuczyńska, 1992).

Gender

Research regarding the relationship between sexual satisfaction and quality of life among young adults demonstrated that, in the case of women, sexual satisfaction is strongly related to quality of life, both globally and in particular. Among men, sexual satisfaction was related only to the psycho-physical dimension (Dolińska-Zygmunt, Nomejko, 2011). The results gathered confirm the viewpoint of sexologists, according to which a woman's sexual satisfaction is determined not by physical changes that the body undergoes, but by mental factors. It is the context that decides whether excitation will be perceived and interpreted as sexual (Nowosielski, 2010). The circular model of woman's sexuality, put forth by Basson (2005), stipulates that, while being sexually aroused, an individual evaluates information coming from three sources: cognition, emotions and genitals. Women often omit genital information and concentrate on cognitive and emotional evaluations. This is connected with anatomy and socialization. Physical pleasure and fulfilling one's physiological needs are only one of the motivations of sexual activity. Intimacy, positive emotions, feeling attractive and being satisfied with the relationship, which can be reinforced by sex, are also very important. Reaching satisfaction in the mentioned areas affects the level of sex life satisfaction. It often happens that women engage in intercourse in order to fulfill those needs, regardless of the fact that they do not, initially, experience arousal. Arousal can, however, be initiated by stimulation – and after erotic stimuli have started. Due to cognitive changes, the stimuli, understood initially as neutral, begin to be perceived as strongly arousing.

Age

Most studies regarding sexual satisfaction determinants concern young adults. Sexuality of the middle-aged and elderly is an area veiled both by social taboo and scientific neglect. The majority of theories of psycho-sexual development are restricted to the period between birth and young adulthood. Yet, according to life-span psychology, a human being's psycho-sexual development lasts a whole lifetime. Depicting sexual satisfaction determinants at various stages of adulthood is, therefore, very important. Even more so if one takes into account extended life spans of ageing societies. Studies show that people who stay sexually active in late adulthood, enjoy good health and happiness (DeLamater, 2012). Subject literature signalizes that the frequency of sexual intercourse decreases with age; however, sexual satisfaction stemming from it does not. On the contrary – the level can, in fact, increase (Kivela, 1986, after: Cichocka, 2006; Delamater, 2012). With age, particularly among women, awareness of personal sexuality and the needs connected with it rises, alongside with the ability to communicate one's sexual expectations. In middle and late adulthood, psycho-sexual development is connected with adapting to changes stemming from interaction between various factors, for instance biological and cultural. With regard to these changes the sexual satisfaction determinants can undergo alterations. With age more sexual-organ-related dysfunctions occur in both women and men. At this point one can witness the increasing need to diversify and intensify sexual stimuli, or sexual practices. When considering older people, one can witness decreased interest with the sexual act, understood in the conventional manner as penetration. In return the need for caressing and foreplay grows (Adams, Turner, 1988). Growing older, people tend to gain perspective on sexual fitness (Izdebski, 2012). Interest in genitalia decreases and sexual dysfunctions become less difficult to accept (Leiblum, Rosen, 2005).

Purpose and hypothesis

On the basis of subject literature analysis, one can conclude that relatively few studies regarding human sexuality are set in a functional-holistic paradigm and salutogenetic orientation. Even less space is devoted to researching the predictors of a satisfying sex life among the middle-aged and people in late stages of adulthood (Cichocka, 2007; Izdebski, 2012). This translates to significant shortages in medical knowledge by doctors, psychologists and other people who want to improve health and life-quality among these particular groups. Our research objective was to determine the relation between the chosen psycho-social variables and sexual satisfaction among both women and men in early (21–35 years of age), middle (36–50) and late (above 50) adulthood.

The following research questions were formulated:

1. What is the level of sexual satisfaction among women and men, with regard to their age?
2. What is the relation between psycho-social variables (assessing one's own and partner's attractiveness, satisfaction with a close relationship and sexual practices) with sexual satisfaction, and how does age modify this relationship?

The following hypotheses were formulated:

1. Age does not affect the sexual satisfaction level of women and men.
2. Psycho-social qualities are related to the sexual satisfaction level. The higher one's self-assessed psycho-physical attractiveness, the partner's evaluative psycho-physical attractiveness, the intensified particular declared sexual practices, and the close satisfying relationship; the higher the sexual satisfaction level.
3. Age modifies the relations between psycho-social variables and sexual satisfaction. With age, the importance of sexual practices and satisfaction with a close relationship rises for both men and women.
4. Sexual satisfaction among women is strongly related to sexual practices, to how they evaluate their partner's psycho-physical attractiveness and satisfaction with a close relationship, and among men with self-assessment of psycho-physical attractiveness.

Method

Participants

Two hundred individuals took part in our study. Due to imprecisely completed questionnaires by some individuals, the results are based on answers gathered from only 90 women and 77 men. The subjects' ages ranged between 21 and 72 years (average 40, 82). In the young adult age group (ages 21–35) there were 30 women and 30 men, middle age (36–50) included 29 women and 25 men, and late adulthood (51–72) 31 women and 22 men. The participants described their orientation as heterosexual and declared that they remained in heterosexual relationships spanning from six months to 42 years (average = 14.1). Forty-six percent were in informal relationships, and 54% were married). Seventy-seven percent lived with their partner. Every person who underwent the survey had received education – three percent primary, 14% professional education, 20% secondary education, 22% incomplete higher education, and 43% higher education. The majority of the subjects declared that they were practicing their faith (see Table 1).

Table 1*Differentiation of the test group based on Age, Duration of Relationship and Type of Relationship*

Age group	Duration of relationship in years	Formalization (marriage)	Sex	Frequency
21–35 (n=60)	1–4 (n=44)	Formalized relationship (n=2)	F	2
			M	0
	5–20 (n=16)	Non-formalized relationship (n=42)	F	19
			M	23
		Formalized relationship (n=8)	F	4
			M	4
36–50 (n=54)	1–4 (n=10)	Non-formalized relationship (n=8)	F	5
			M	3
	5–20 (n=25)	Formalized relationship (n=1)	F	0
			M	1
		Non-formalized relationship (n=9)	F	8
			M	1
>20 (n=19)	Formalized relationship (n=19)	F	12	
		M	7	
	Non-formalized relationship (n=6)	F	1	
		M	5	
51–72 (n=53)	1–4 (n=6)	Formalized relationship (n=0)	F	0
			M	0
	5–20 (n=12)	Non-formalized relationship (n=19)	F	8
			M	11
		Formalized relationship (n=3)	F	1
			M	2
>20 (n=35)	Non-formalized relationship (n=3)	F	2	
		M	1	
	Formalized relationship (n=6)	F	5	
		M	1	
	Non-formalized relationship (n=6)	F	1	
		M	5	
>20 (n=35)	Formalized relationship (n=32)	F	19	
		M	13	
	Non-formalized relationship (n=3)	F	3	
		M	0	

Source: own work

Procedure and Design

The study was conducted in Poland, in 2012. The participants were recruited via the snow-ball method. The majority of participants fit into the chosen criteria, they belonged

to the agreed age groups, sexual activeness, and remained in their relationship. The subjects answered the provided questions anonymously. The questionnaires took 20 minutes to complete, and were preceded by the following instructions:

“The following inquiry regards various aspects of close relationships and sexuality. The survey is anonymous and the results will be utilized for the use of science. Please answer every question. Otherwise, the results will not be usable in further analysis. You need to provide one answer for each question. The answers should be submitted by inserting words/numbers or an “X” in the appropriate columns. While answering the questions please keep your current relationship in mind.

Measures

Sexual Satisfaction Questionnaire

The Sexual Satisfaction Questionnaire (Nomejko, Dolińska-Zygmunt, 2014) was formulated in 2010. On the basis of subject literature, 35 questions were prepared. Of these the judges listed 28 as appropriate for the survey. These questions were included in the pilot version. For the benefit of further analysis, it was decided to use only these questions which demonstrated discriminatory power below 0.4. We also eliminated those questions between which a significant, two-sided Pearson correlation was discernible, assuming that they might be too similar and thus carry similar meanings. To evaluate the adjusted model, we used the RMSEA index, which reached 0.073. In this case, values below 0.05 signified a precise adjustment of the model, lower than 0.08 were understood as satisfactory, and higher than 0.1 represented lack of adjustment. The method's validity α was measured by Cronbach's alpha coefficient, which attested to a high coherence of the questionnaire, while its value reached 0.83. Ultimately, the method included 10 items. The surveyed individual related to the questions using a four-level Likert scale. The gathered result informed about the sexual satisfaction level. The Sexual Satisfaction Questionnaire was confirmed by the correlation between its results, and the results stemming from the other questionnaire application, whose results should, in theory, be the same in relation to the level of sexual satisfaction (Nomejko, Dolińska- Zygmunt 2014).

Psycho-Physical Attractiveness Questionnaire

Our method used to measure the self-assessment of personal, psycho-physical attractiveness and the evaluation of the partner's psycho-physical attractiveness was established in 2012. In an internet survey one question was provided – “*what makes your partner attractive to you*”. Fifty-one individuals took part in the survey. The most frequent answers were grouped into 12 categories. The individual's task was to evaluate their own attractiveness and their partner's. Answers were based on a five-level Likert scale. Fac-

tor-analysis demonstrated the existence of three dimensions, which were defined as image attractiveness (facial features, complexion, clothing style, scent, hygiene), physical attractiveness and vitality (body measurements, movement, coordination), and mental attractiveness (character traits, intelligence, interests). Each coefficient sum amounts to a self-assessed global image of psycho-physical attractiveness and the partner's psycho-physical appeal. The method's accuracy was measured using Cronbach's alpha coefficient and signifies high questionnaire coherence (see Table 2).

Table 2

Statistics Showing Self-Assessment Accuracy of Psycho-Physical Attractiveness and in Evaluating the Partner's Psycho-Physical Attractiveness Questionnaire

Cronbach's alpha coefficient		
	Evaluation of Partner's Psycho-Physical Attractiveness	Self-Assessment of Psycho-Physical Attractiveness
Global result	0.89	0.87
Mental attractiveness	0.74	0.67
Attractiveness of physical fitness and vitality	0.83	0.83
Attractiveness of image	0.85	0.83

Source: own work

Sexual Practices Questionnaire

We understand sexual practices, as does Lew-Starowicz (2003), as the art of sexual intercourse, which comprises techniques of fore-play and sexual arousal.

The questionnaire was designed using the Scale of Sexual Stimuli by Z. Lew-Starowicz (1997). The method includes 13 items. The participant marks his answer on a five-level scale. The subject declares the frequency with which sexual intercourse coincides with particular sexual practices. Factor-analysis showed the existence of three factors called hereafter as fore-play (cuddling, kissing, caressing the body), the sexual act (touching and arousing the genitals, oral sex, introducing the penis into the vagina, change of position) and quasi-perverse behavior (arousing one's own genitals using hands, erotic gadgets, realizing fantasies). Cronbach's alpha coefficient signifies a high level of test coherence (global result $\alpha=0.91$; fore-play $\alpha=0.90$; the sexual act $\alpha=0.89$; quasi perverse behavior $\alpha=0.74$).

Intimacy, Passion and Commitment Questionnaire

The Intimacy, Passion and Commitment Questionnaire was used to assess one's satisfaction with a close relationship. Assisted by a questionnaire designed by Acker and Davis

(1992) one can measure the intensity level of three love constituents: intimacy, passion and commitment. The method uses three scales enlisting 36 items: intimacy, passion and commitment. The results indicate the particular factor's intensity. For our study a Polish version adapted by Wojciszke (2005) was used. The statistical analysis took only the global result into consideration, for which Cronbach's alpha was 0.97.

Results

Data analysis

From among 200 participants tested, we received 167 completed questionnaires. These were submitted to further statistical analyses. Every analysis was conducted using SPSS 17 and Microsoft Excel.

Descriptive statistics

The following Table (see Table 3) comprises descriptive statistical data of the measured variables. Participant sex did not affect the sexual satisfaction levels of any age group – the youngest (21–35) $t(58)=-0.468$; $p=0.64$; middle (36–50) $t(52)=-1.4$; $p=0.16$ or oldest (51–72) $t(51)=-0.65$; $p=0.5$. The individuals tested declared satisfaction of their sex life. Moreover, we found no evidence of age influencing sexual satisfaction in women $F(2,87)=1.25$; $p=0.29$; nor in men $F(2,74)=0.48$; $p=0.6$.

Table 3

Descriptive Statistics of the Measured Variables

Age	Variables	n	Women				Men				
			Minimum	Maximum	Average	Standard deviation	n	Minimum	Maximum	Average	Standard deviation
21–35	Sexual satisfaction	30	12	40	32.97	6.810	30	25	40	33.67	4.551
	Satisfaction with close relationship	30	81	180	149.87	20.544	30	115	180	150.60	19.685
	Partners attractiveness – global result	30	32	60	52.83	6.215	30	45	60	53.33	4.852
	Partners attractiveness – image	30	14	25	22.80	2.552	30	20	25	23.37	1.712
	Partners attractiveness – physical fitness and vitality	30	10	20	17.00	2.505	30	12	20	17.07	2.333
	Partners attractiveness – mental attractiveness	30	8	15	13.03	2.025	30	10	15	12.90	1.583
	Own attractiveness – global result	30	34	58	48.43	6.317	30	39	60	49.87	5.399

Own attractiveness – image	30	16	25	21.50	2.886	30	16	25	21.10	2.524
Own attractiveness – physical fitness and vitality	30	9	20	15.23	2.849	30	11	20	15.97	2.414
Own attractiveness – mental attractiveness	30	7	15	11.70	1.878	30	9	15	12.80	1.648
Sexual Practices global result	30	19	60	46.33	8.066	30	32	64	48.93	6.807
Foreplay	30	8	25	22.00	3.677	30	12	25	22.03	3.124
Sexual act	30	8	25	18.27	3.965	30	14	25	19.90	2.881
Quasi-perverse behaviour	30	2	11	6.07	2.599	30	4	15	7.00	2.560
36–50 Sexual satisfaction	29	15	40	31.38	6.417	25	24	40	33.64	4.966
Satisfaction with close relationship	29	106	179	148.55	19.599	25	36	180	142.28	28.777
Partners attractiveness – global result	29	38	60	49.90	6.576	25	40	60	51.76	5.607
Partners attractiveness – image	29	17	25	21.48	2.544	25	16	25	22.76	2.538
Partners attractiveness – physical fitness and vitality	29	7	20	15.93	3.184	25	12	20	16.20	2.398
Partners attractiveness – mental attractiveness	29	9	15	12.48	1.765	25	11	15	12.80	1.323
Own attractiveness – global result	29	34	60	48.52	5.488	25	30	60	48.76	7.019
Own attractiveness – image	29	17	25	21.59	2.212	25	12	25	20.64	3.522
Own attractiveness – physical fitness and vitality	29	8	20	14.93	2.789	25	8	20	15.12	2.804
Own attractiveness – mental attractiveness	29	9	15	12.00	1.439	25	10	15	13.00	1.384
Sexual Practices global result	29	20	61	40.41	10.432	25	20	59	42.80	10.962
Foreplay	29	9	25	18.90	4.601	25	10	25	19.16	4.460
Sexual act	29	6	25	16.03	4.740	25	7	24	17.60	5.354
Quasi-perverse behaviour	29	3	13	5.48	3.135	25	3	12	6.04	2.715

51–72 Sexual satisfaction	31	22	38	30.65	4.231	22	21	39	31.45	4.788
Satisfaction with close relationship	31	62	178	135.74	24.136	22	50	180	131.23	31.181
Partners attractiveness – global result	31	22	60	45.65	7.521	22	42	60	49.18	5.439
Partners attractiveness – image	31	8	25	19.55	3.940	22	17	25	21.18	2.403
Partners attractiveness – physical fitness and vitality	31	7	20	14.32	3.249	22	12	20	15.86	2.642
Partners attractiveness – mental attractiveness	31	5	15	11.77	2.291	22	6	15	12.14	2.145
Own attractiveness – global result	31	34	59	48.94	5.112	22	35	60	46.50	6.850
Own attractiveness – image	31	17	25	21.68	2.023	22	14	25	19.59	2.594
Own attractiveness – physical fitness and vitality	31	9	20	15.03	2.846	22	7	20	15.09	3.517
Own attractiveness – mental attractiveness	31	8	15	12.23	1.499	22	9	15	11.82	1.918
Sexual Practices global result	31	18	65	37.58	11.477	22	21	59	41.32	10.947
Foreplay	31	9	25	18.42	4.745	22	9	25	19.91	4.319
Sexual act	31	5	25	13.42	5.458	22	5	25	14.64	6.075
Quasi-pervse behaviour	31	3	15	5.74	2.852	22	3	14	6.77	2.910

Source: own work

Correlation between psycho-physical attractiveness of oneself and the partner, satisfaction with a close relationship, intensified sexual practices, and sexual satisfaction of women and men with regard to age

For the youngest women (21–35) sexual satisfaction was strongly related to the partner’s image appeal, his mental attractiveness and the self-evaluated mental attractiveness (see Table 4). Women aged 36 to 50 correlated their with all variables except their own physical fitness and vitality. The variables considered most important was foreplay, the sexual act and satisfaction stemming from being in a close relationship (see Table 4). In the 51–72 age group, sexual satisfaction was related to foreplay, self-assessment of physical fitness and vitality and the partner’s image attractiveness (see Table 4).

Table 4

Spearman's Correlation between sexual satisfaction and independent variables in women's and men's groups, with regard to age

	Women			Men		
	21–35 (n=30)	36–50 (n=29)	51–72 (n=31)	21–35 (n=30)	36–50 (n=25)	51–72 (n=22)
Sexual Practices global result	0.41*	0.68**	0.49**	-0.03	0.6**	0.4
Foreplay	0.26	0.74**	0.59**	-0.13	0.52**	-0.3
Sexual act	0.35*	0.62**	0.34	0.12	0.59**	0.49*
Quasi-perverse behaviour	0.26	0.48**	0.2	-0.06	0.31	0.48*
Own attractiveness – global result	0.5**	0.45*	0.3	0.41*	0.75**	0.53*
Own attractiveness – image	0.43*	0.4*	0.24	0.2	0.64**	0.04
Own attractiveness – physi- cal fitness and vitality	0.28	0.3	0.4*	0.41*	0.61**	0.52*
Own attractiveness – men- tal attractiveness	0.53**	0.46*	0.11	0.28	0.79**	0.58**
Partners attractiveness – global result	0.71**	0.5**	0.18	0.07	0.72**	0.32
Partners attractiveness – image	0.7**	0.49**	0.4*	0.15	0.66**	0.07
Partners attractiveness – physical fitness and vitality	0.46**	0.43*	0.16	0.07	0.64**	0.4
Partners attractiveness – mental attractiveness	0.64**	0.46*	0.07	-0.1	0.63**	0.08
Satisfaction with close relationship	0.49**	0.66**	0.27	0.07	0.42*	0.06

** Correlation is relevant on the level of 0.001 (two-sided)

* Correlation is relevant on the level of 0.05 (two-sided)

Source: own work

Results gathered from the youngest male group (21–35) indicated that sexual satisfaction was in relationship only with self-assessment of one’s own attractive physical fitness and vitality (see Table 4). For the middle-age group (36–50), sexual satisfaction correlated with each of variable, except for quasi-perverse behavior (see Table 4). Men aged 51 or more, revealed that sexual satisfaction in their case was strongly related to self-assessed mental attractiveness and their physical fitness and vitality (see Table 4).

Predictors of sexual satisfaction among women and men

The model for these predictors was well suited (see Table 5), better, however, for women ($F(4.85)=17.15$ $p<0.001$) than for men ($F(4.72)=8.42$ $p<0.001$).

Table 5

Variance analysis for dependent variable – sexual satisfaction and independent variables – psycho-physical attractiveness of oneself and the partner, satisfaction with close relationship, intensification of sexual practices

Gender	Model	Sum of Squares	df	Mean Square	F	Sig.
Women	Regression	1393.691	4	348.423	17.152	0.001
	Residual	1726.631	85	20.313		
	Total	3120.322	89			
Men	Regression	557.809	4	139.452	8.422	0.001
	Residual	1192.139	72	16.557		
	Total	1749.948	76			

Source: own work

Among women the strongest predictor occurred to be sexual practices ($\beta=0.36$; $p<0.001$), then close relationship satisfaction ($\beta=0.3$; $p<0.008$) and one’s own psycho-physical attractiveness ($\beta=0.29$; $p<0.004$). Among men the only predictor of the sexual satisfaction level was psycho-physical attractiveness of oneself ($\beta=0.37$; $p<0,001$). See Table 6.

Table 6*Analysis of regression for dependent variable – sexual satisfaction*

Gender	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
women	(Constant)	0.96	4.473		0.215	0.831
	Sexual practices	0.199	0.059	0.357	3.385	0.001
	Own attractiveness	0.307	0.104	0.29	2.945	0.004
	Partners attractiveness	-0.078	0.109	-0.097	-0.717	0.476
	Satisfaction with close relationship	0.079	0.029	0.297	2.712	0.008
men	(Constant)	12.631	4.626		2.73	0.008
	Sexual practices	0.072	0.054	0.15	1.332	0.187
	Own attractiveness	0.365	0.097	0.49	3.751	0
	Partners attractiveness	-0.003	0.118	-0.004	-0.029	0.977
	Satisfaction with close relationship	-0.003	0.018	-0.015	-0.141	0.888

Source: own work

Discussion

The innovativeness and value that our study has of the psycho-social determinants of sexual satisfaction is related to its holistic-functional foundation, broad scope insight

(the determinants were studied at every adult stage), and to the possibility that the results can be implemented therapeutically and medically.

As our study's hypothesis assumed, age did not influence the level of sexual satisfaction for either women and men. Biological changes related to aging were not synonymous with loss of sexual values, and sometimes even tend to develop new ones, including the person's becoming more attractive and appreciative. Also a loss of testosterone due to aging does not have to influence desire and passion. Biological and physiological events related to being in love are the same regardless of age (Lew-Starowicz, 2000).

Women's satisfaction strongly related to remaining in a close relationship, evaluating their own psycho-physical attractiveness, and being involved in intense sexual practices. For men it related mostly to how they assessed their own psycho-physical attractiveness. Many scientists point to the differences in determinants influencing women's and men's sex life evaluation. Nowosielski (2010), among others, emphasizes that a woman's sexual satisfaction is not necessarily connected with orgasm; women are more prone to focus on emotional aspects of their close relationship. In their perspective, the broader, more complex context – situational, social and mental – holds greater importance. Men, however, more often relate sexual satisfaction to the physiological aspect of sex. Zhang and others (2012) claim, that women perceive their sex life as satisfactory only when a various psychological criteria (security, intimacy, bond between partners) are met. Kuczyńska and Kaczmarek (2001) and Kedde and Berlo (2006) share this view. According to them, most women consider a quality relationship as an important predicate for sexual satisfaction. Men tend to ascribe a stronger meaning to fitness and vitality, and the lack of sexual dysfunctions.

Age influenced the relations between psycho-social determinants and sexual satisfaction. For women aged 21–35 sexual satisfaction was strongest with their evaluation of the partner's attractiveness. Those aged 36–50 correlated it to sexual practices and satisfaction in a relationship; and women from 51–72 connected it with sexual practices and their assessment of their partner's and their own personal attractiveness. When considering men, regardless of age, the level of sexual satisfaction remained strongest with their self-assessed psychophysical attractiveness. Differences in the relation between sexual satisfaction and psycho-social variables in all tested age groups can be explained by the maturity level reached at various stages of psycho-physical development. According to Lew-Starowicz (1998), sexual maturity relates to biological, mental and relationship maturity. It is characterized by the ability to control one's sexual reactions, familiarity with their personal and partner's erogenous zones, being able to adjust sexual practices to their personal and the partner's needs, to treat sex as

an important, yet, not crucial sphere of life, and by the ability to treat sexual difficulties with proper perspective.

Differences between the three age groups can be also explained by social changes, which have a strong influence on the sexual sphere. Cultural, environmental and social influences cooperate with psychological and biological factors, adjusting sexual needs and behavior (Imieliński, 1990). Research was conducted on three generations of Polish people, who grew up in different surroundings and had different approaches to sexuality. Women's position in society has changed, birth control has disseminated the level of sexual culture and expectations between sexual partners have risen, and boundaries of sexual freedom are wider.

Limitations

Our study is not without limitations. Its weakness is, firstly, a small number of test subjects and the unrepresentativeness of the test group. Moreover, in cultures which put a taboo over sexuality, and the Polish, Catholic culture is just such a one, people refrain from discussing their sexuality and therefore are reluctant to take part in similar studies. As such, the people who are open with their sexuality, as our group members were, are often satisfied with it.

Additionally, the 50+ age group was characterized by extensive dispersion, where the oldest participant was 72. Unfortunately, we were unable to form an additional group for the oldest participants. We came upon significant difficulties in recruiting test subjects older than 65. In Poland it is often considered unnatural for older people to be sexually active, and irrelevant in terms of life quality (Cichocka, 2007; Izdebski, 2012). This translates to significant deficiencies of knowledge by doctors, psychologists and other individuals who deal with health and life quality issues of this age group. Sexuality during late adulthood is considered taboo, not only in common discourse, but also among many Polish specialists.

Our subsequent study will include additional variables determining the level of sexual satisfaction, such as communication in a close relationship, existing sexual dysfunctions, being able to experience pleasure from sexual acts, and evaluating a partner's pleasure.

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