

14

The Role of Personality and Sensation Seeking in Understanding Sociosexuality

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Abstract

The main purpose of the study was to gain insight into relationship between sociosexuality, sensation seeking, and personality traits while reflecting on gender differences in short- and long-term mating orientation as dimensions of sociosexuality. Therefore, the goal was to explore the contribution of sensation seeking in predicting short- and long-term mating orientations over gender and personality traits. The data of 596 participants (62.9% female) was collected by an online survey consisting of personal data, Sociosexual Orientation Inventory, Sensation Seeking Scale and Big Five Aspect Scale. Gender, personality traits and sensation seeking explained a total of 16% of the variance in long-term mating orientation (LTMO), with agreeableness explaining the most and sensation seeking additionally explaining only 2% of its variance over gender and personality traits. The same predictors explained 37% of the variance in short-term mating orientation (STMO), with sensation seeking explaining the most with 16% above and beyond gender and personality traits. The results suggest that men are more prone to STMO, while women are more likely to have LTMO. When relationship status is considered, participants that are in relationship tend to be more prone to LTMO while participants that are single seem to be more prone to STMO. The results provide better understanding of sociosexuality and the contribution of sensation seeking, personality traits, and gender differences in comprehending the complex construct of sociosexuality.

Keywords: sociosexuality, sociosexual orientation, personality traits, sensation seeking, gender

Introduction

Sociosexuality or sociosexual orientation is a tendency or willingness to engage in sexual actions without emotional commitment (Simpson & Gangestad, 1991a). It was defined by Simpson and Gangestad (1991a), who distinguish a restricted sociosexual orientation, which includes need for closeness and commitment, from unrestricted one, which includes lack of the need for commitment and a tendency to have more sexual partners at once. According to Sexual strategies theory (Buss & Schmitt, 1993), humans engage in certain types of sexual relations in order to solve specific adaptive problems which have befallen their ancestors during the evolutionary process in the past. Therefore, mating preferences and decisions occurred as a result of the selection process, and current mating strategies depend on and are highly sensitive to temporal context of short- and long-term mating relationships (Buss & Schmitt, 1993). In addition, a general model of heritable personality differences describes personality traits as individual reaction norms of genotypes across different environments, resulting in different consequences (Penke, 2007). In other words, certain personality traits developed as a result of accommodating to specific environments in the past.

Due to flexibility of sexual behavior caused by different opportunities and constraints in local environments, Bailey, Gaulin, Agyei and Glaude (1994) suggest a model of sociosexuality which differentiates sexual behavior from sexual attitudes, therefore separating psychological from behavioural mating tactics. Webster and Bryan (2007) support this model, explaining that attitudes and behaviors correlate differently with certain aspects of personality. Following the idea of Bailey et al. (1994), Jackson and Kirkpatrick (2007) introduced a new, multidimensional model of sociosexuality, arguing that it provides more information about other mating strategies rather than just short-term ones, as was the case in a previous, dichotomous model. Therefore, they considered sociosexuality to be defined through three separate dimensions: short-term mating orientation (STMO), long-term mating orientation (LTMO) and previous sexual behaviors (PBO). As the model is developed as an expanded version of the original bipolar model, Jackson and Kirkpatrick (2007) consider restricted sociosexual orientation and LTMO, as well as unrestricted sociosexual orientation and STMO, synonyms. Besides emphasizing the importance of differentiating sexual attitudes from sexual behaviors, the authors also suggest that there is a need for separation of previous short-term sexual behaviors from total previous sexual behavior, as there are more individual variations and between-sex differences in short-term rather than long-term mating orientation (Buss & Schmitt, 1993; Jackson & Kirkpatrick, 2007).

Some research also suggests that risky sexual behavior, such as number of sexual partners, can be used as an indicator of sociosexual orientation (e.g. Hoyle, Fejfar, & Miller, 2000; Simpson & Gangestad, 1991a). It has also been proven to correlate with sensation seeking (Del Giudice, Klimczuk, Traficante, & Maestripieri, 2014; Donohew et al., 2000; Hoyle et al., 2000), or one's tendency to seek new, varied, intense experiences, and the willingness to take physical, social, and other risks in order to maintain the feeling of sensation (Zuckerman et al., 1972). Sensation seeking is comprised of four factors: Thrill and Adventure seeking refers to engagement in outdoor activities which include speed or danger; Experience seeking describes the need for various inner experiences, such as travel, drugs, or art in any form; Disinhibition expresses extraverted and hedonistic philosophy, and Boredom susceptibility stands for intense disliking repetition, routine and predictability in everyday actions (Zuckerman et al., 1972).

Previous research indicates positive correlation between short-term mating orientation and extraversion in terms of a more hedonistic outlook on sex and a higher level of engagement in sexual activities, both in Canadian and Eastern European sample (Barnes, Malamuth, & Check, 1984; Schmitt & Shackelford, 2008). STMO is in a positive relation with openness to experience and a negative one with agreeableness, while LTMO is related to higher levels of agreeableness, conscientiousness, and self-esteem (Jones, 2017). Furthermore, unrestricted attitudes, defined as more interest in casual sexual relations rather than long-

term ones, as well as more favorable attitudes toward uncommitted sexual actions, correlate positively with psychoticism and impulsivity, and are in a negative relation with agreeableness and conscientiousness (Barnes et al., 1984; Del Giudice et al., 2014). Emotional intelligence trait, including emotional regulation, low impulsiveness, and ability of maintaining fulfilling personal relationships, represents a predictor of higher LTMO in Americans (Figueredo, Cuthbertson, Kauffman, Weil, & Gladden, 2012), while shyness correlates negatively with both sociosexual attitudes and behaviours in a German sample (Penke & Asendorpf, 2008). Both short-term and long-term mating orientations are significantly predicted by HEXACO's Honesty-humility, Emotionality, and Conscientiousness, with the addition of Extraversion as a significant predictor of LTMO (Strouts, Brase, & Dillon, 2017). Kardum, Gračanin, and Hudek-Knežević (2006) found openness to be a more significant predictor of various sexuality aspects in men, while conscientiousness represented a more significant predictor in women, especially regarding sexual loyalty. Neuroticism was mainly not found to be significantly correlated with either sociosexual orientation (e.g. Barnes et al., 1984; Del Giudice et al., 2014; Jones, 2017), although some research found inconsistencies both cross-culturally and between the sexes (Schmitt, 2004; Schmitt & Shackelford, 2008; Wright & Reise, 1997). Moreover, high sensation seeking has been related to low conscientiousness and agreeableness (Zuckerman et al., 1993; Del Giudice et al., 2014) and is positively associated with extraversion, psychoticism, openness, and impulsivity (Eysenck & Zuckerman, 1978; Del Giudice et al., 2014; Hoyle et al., 2000; Webster & Crysel, 2012). It was also recognized as a significant mediator in the relationship between substance use, personality, sexuality variables and sexual risk taking in women (Turchik, Garske, Probst, & Irvin, 2010). Penke and Asendorpf (2008) found that sensation seeking is positively related to all aspects of sociosexual orientation (e.g. Del Giudice et al., 2014; Penke & Asendorpf, 2008), while other research emphasizes its strong effect on short-term mating characteristics and both unrestricted sexual attitudes and behaviours (Del Giudice et al., 2014; Hoyle et al., 2000). Moreover, global sociosexual orientation is found to be significantly lower in coupled than in single women, while men do not differ by relationship status (Penke & Asendorpf, 2008). Penke and Asendorpf (2008) also suggest that individuals in a relationship have more restricted desires and slightly higher unrestricted behaviour than the single. On the other hand, evolutionary theory explains that, in terms of benefits, women should be more prone to engaging in long-term relationships that provide them with resources for themselves and their offspring, while men should be more prone to engaging in short-term relationships, expanding their chances in directly expanding the number of their offspring (Buss, 2019). However, previous research was largely focused on examining differences in relationship status between restricted and unrestricted sociosexual orientation instead of comparing short and long term mating orientations.

Due to inconsistencies regarding relations between emotional stability and neuroticism with STMO and LTMO, as well as lack of research regarding these dimensions of sociosexuality, the aim of this research was to gain a more accurate insight in the relationship between sociosexuality, personality traits, and sensation seeking in men and women. Therefore, the goals of this research were (1) to gain an insight in a relationship between personality traits, sensation seeking and sociosexuality and (2) to explore additional contribution of sensation seeking in predicting sociosexual orientation over gender and personality traits.

Based on the examined literature, we hypothesized that:

- (1) STMO will be positively associated with extraversion and openness, and negatively with agreeableness and conscientiousness, LTMO will correlate positively with agreeableness, conscientiousness, and emotional stability, while PSB will be positively associated with openness and extraversion, and negatively with conscientiousness;
- (2) sensation seeking will be positively associated with STMO and PSB, and negatively with LTMO;
- (3) men will be more prone to STMO, while men and women will not differ in proneness to LTMO;
- (4) single participants will score higher on the dimensions of STMO and PSB, while participants

- who are in a relationship will score higher on the dimension of LTMO;
- (5) sensation seeking will explain most of the variance in STMO over gender and personality traits, while the variance of LTMO will be mostly explained by personality traits; agreeableness, conscientiousness and emotional stability

Method

Participants

The sample consisted of 596 students from the University of Zagreb, Croatia. The age of the participants ranged from 18 to 35 ($M=22.61$; $SD=2.87$), 62.9% of whom were female, and 50.2% of participants were single at the time the study was carried out. Due to the nature of the survey, a non-probabilistic sampling method and a convenient sample were used.

Instruments

Sociosexuality. Sociosexuality was measured by the Croatian version of Sociosexual Orientation Inventory (Jackson & Kirkpatrick, 2007) adapted by Nikolić, Šimić, Bubić and Pavela (2016). This 25-item questionnaire measures participants' attitude towards short- (STMO) and long-term mating orientations (LTMO) and previous sexual behavior (PSB). The participants evaluated their personal level of agreement with the first 20 items, listed on a seven-point scale (1-*strongly disagree*; 7-*strongly agree*). Item 21 required choosing one out of eight answers, while items 22-25 required entering a number. The results were formed separately for all three factors. Results for attitude towards STMO were formed by averaging answers on items 1 to 10, and for attitude towards LTMO by averaging answers on items 11 to 16, 18 and 20. Results for previous sexual behavior were formed as a sum of items 22, 23, and 24. The rest of the items weren't taken into analysis due to unclear factor structure and lower factor saturation. Reliability coefficients for subscales were medium to high (attitude towards STMO ($\alpha=.94$), LTMO ($\alpha=.91$), and PSB ($\alpha=.77$)).

Sensation Seeking. Sensation seeking (SS) was measured by the Sensation Seeking Scale V (SSS-V) constructed by Zuckerman, Eysenck & Eysenck (1978). In this paper Croatian version of SSS-V was used, taken from a study by Bratko & Butković (2003). This 40-item forced-choice questionnaire measures four factors: thrill and adventure seeking (TAS), experience seeking (ES), disinhibition (DIS), and boredom susceptibility (BS). Participants chose the answer A or B for each item, whichever described them better. The results were obtained by using the scoring key, ranging from 0 to 10 for each factor, or 0-40 for the whole scale. Cronbach's alpha reliability coefficient in this study was $\alpha=0.80$ for the complete scale and ranged from $\alpha=.59$ to $\alpha=.73$ for the four subscales.

Personality. Personality was measured by the Big Five Aspect Scale (BFAS) constructed by DeYoung, Quilty & Peterson (2007) and adapted by psychology students of Croatian studies in University of Zagreb, during Personality Measurement class with the mentorship of the professor Ana Butković (2018). BFAS measures five domains, each consisting of two aspects. In the domain of neuroticism, the aspects of volatility and withdrawal are differed, in agreeableness compassion and politeness, in conscientiousness industriousness and orderliness, in extraversion enthusiasm and assertiveness, and in openness/intellect intellect and openness. Each aspect consists of 10 items, making a total of 100 items. Participants' task was to evaluate their personal level of agreement with each item, listed on a five-point scale (1-*strongly disagree*; 5-*strongly agree*), which makes a total of 15 scores. Cronbach's alpha coefficient in this study ranged from $\alpha=.83$ to $\alpha=.88$.

Procedure

The participants were given an online questionnaire, constructed on Google Forms as a combination of personal data (age, gender, relationship status, and sexual orientation), Sociosexual Orientation Inventory, Sensation Seeking Scale V, and Big Five Aspects Scale. The online questionnaire was spread on social media, student's groups, and mailing lists. At the beginning of the questionnaire, the participants were explained the purpose of the research, anonymity, that the results will be used exclusively for scientific purposes and will be processed and displayed only at the group level. Participants were told in advance that participation is voluntary and that they can give up at any time. Every participant answered all of the questions in the survey and the main order of questions in every scale was previously randomized by determined software, so the effect of question order was brought to its minimum. Estimated time for completing the survey was 15 to 20 minutes.

Results

Firstly, descriptives for self-evaluated variables were calculated. Results of the Kolmogorov-Smirnov (K-S) test and skewness values show that the data was mostly approximately symmetric, with skewness between $-.282$ to $.369$. Agreeableness was an exception, as it was moderately skewed to the left ($-.730$). LTMO and PSB were the only variables that showed high skewness, -1.895 and 3.798 respectively. The distribution of the results shows that majority of participants estimate themselves as highly agreeable and highly prone to LTMO. On the other hand, high skewness that results on PSB show, may indicate that majority of participants reported having very little previous sexual behaviour. The results possibly reflect the sample of participants which are mostly young students that are not so sexually experienced.

Table 1 shows Pearson's correlations between sociosexual orientation, personality traits, and sensation seeking. For both mating orientations, only neuroticism showed insignificant correlation. LTMO significantly correlates with all measured variables ($p < .01$). The only negative correlation was between attitude towards LTMO and SS, which shows that participants who scored higher LTMO attitudes are more likely to have lower desire for sensation seeking. Moreover, correlations between LTMO and all personality traits were positive, which indicates that participants who scored higher on attitudes towards LTMO also tend to see themselves as more agreeable, extraverted, conscientious, and higher in the dimension of openness/intellect. STMO significantly correlates with all measured variables at $p < .01$, apart from extraversion ($p < .05$). The results imply that participants who scored higher on attitudes towards STMO were, on average, more likely to have higher desire for sensation seeking and evaluate themselves as more extraverted, open, and higher on intellect. On the contrary, those who scored higher on attitudes towards STMO had, in average, lower evaluations of their agreeableness and conscientiousness. PSB correlated positively with extraversion ($p < .05$) and negatively with agreeableness ($p < .01$), which suggests that participants who scored higher on PSB tend to see themselves as more extraverted and less agreeable. Correlations between PSB and other personality traits were not statistically significant.

Table 1. *Pearson's correlations between sociosexual orientation, personality traits, and sensation seeking (N=596)*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. STMO	1	-.261**	.437**	.538**	-.002	-.228**	-.205**	.092*	.135**
2. LTMO		1	-.184**	-.164**	-.008	.324**	.158**	.202**	.210**
3. PBS			1	.294**	-.036	-.206**	-.029	.145**	.032
4. SS				1	.002	-.204**	-.327**	.140**	.207**
5. Neuroticism					1	-.062	-.322**	-.337**	-.078
6. Agreeableness						1	.142**	.100*	.299**
7. Conscientiousness							1	.330**	.136**
8. Extraversion								1	.422**
9. Openness/Intellect									1

**p<.01/ * p<.05

Sensation seeking significantly correlated with all measured variables (p<.01) except neuroticism. SS correlated positively with STMO and PSB, while being negatively associated with LTMO. Furthermore, it correlated positively with conscientiousness, openness/intellect, and extraversion, and negatively with agreeableness. The results suggest that participants more prone to sensation seeking tend to score higher on STMO and PSB, as well as see themselves as more extraverted, and open, and higher on conscientiousness and intellect. On the other hand, participants less prone to SS are more likely to engage in long-term relationships and see themselves as less agreeable.

After examining correlations, two three-step hierarchical regression analyses were conducted – one for predicting LTMO and one for predicting STMO (Table 2). Both hierarchical regression analysis contained the same sets of predictors. Gender was chosen as predictor in Step 1, , personality traits were added as predictors in Step 2, and sensation seeking in Step 3. Since neuroticism showed insignificant correlation with MO, it was excluded from further analysis. As shown in Table 2, gender, personality traits, and sensation seeking explained 16% of the variance of LTMO, while the same predictors explained 37% of the variance of STMO. Additional contribution of SS was only 2% over gender and personality traits when predicting LTMO, but when predicting attitudes towards STMO, sensation seeking additionally explained 16% above and beyond the same constructs.

Table 2 *Hierarchical regression analysis predicting attitudes towards LTMO and STMO.*

Predictors	Long-term mating orientation		Short-term mating orientation	
	R ² change	β	R ² change	β
Step 1	.01**		.08**	
Gender		-.12**		.28**
Step 2	.13**		.13**	
Gender		-.06		.26**
Agreeableness		.27**		-.23**
Conscientiousness		.07		-.22**

Extraversion		.13**	.11*
Openness/Intellect		.06	.21**
Step 3	.02**		.16**
Gender		-.05	.24**
Agreeableness		.24**	-.12**
Conscientiousness		.01	-.05
Extraversion		.14**	.02
Openness/Intellect		.10*	.09*
Sensation seeking		-.15**	.46**
Total R²	0.16**		0.37**

** $p < .01$ / * $p < .05$

Attitudes towards both LTMO and STMO showed that SS, openness/intellect, and agreeableness contributed significantly over measured variables. Additionally, extraversion appeared to be a significant predictor only for LTMO, and gender only for STMO. The most contributing predictor to understanding LTMO was agreeableness ($\beta = .24$; $p < .01$), while for STMO it was sensation seeking ($\beta = .46$; $p < .01$). Furthermore, gender became insignificant after adding personality traits (Step 2), and openness/intellect became significant after adding SS (Step 3) in predicting LTMO. Furthermore, after adding SS in Step 3 in predicting, conscientiousness and extraversion became insignificant.

Table 3 shows results of an independent sample t-test where participants were grouped based upon their relationship status. In one group, the relationship group, the participants were either in a relationship or in a marriage. In the second group, the single group, participants were single, divorced or in a nonexclusive relationship. The results show that participants that were single are more prone to STMO than participants that are in a relationship, $t(144) = -2.33$ ($p < .05$). Moreover, participants that were in a relationship tend to be more prone to LTMO than single participants, $t(144) = -6.31$ ($p < .01$). There is no difference regarding PSB or SS, $t(144) = .22$ ($p = .82$) between the two groups of participants

Table 3 Independent sample t-test: sociosexual orientation based upon relationship status

	Leven's homogeneity of variances test			<i>df</i>	<i>p</i>	<i>MD</i>	<i>SD</i>
	<i>F</i>	<i>p</i>	<i>t</i>				
STMO	3.87	.05	-2.33	144	.02**	-2.94	1.26
LTMO	.08	.78	-6.31	144	.00**	-6.48	1.03
PSB	2.43	.12	.22	144	.82	.21	.93

Note: ** $p < .01$, * $p < .05$

Discussion

Hypotheses based on previous research were largely supported. The results obtained provided a better understanding of sociosexuality based on personality traits, sensation seeking, and gender. So far, most of the research was inconsistent and poorly comparable due to differences in both conceptualization and measurement of sexual orientation (Schmitt, 2004; Schmitt & Shackelford, 2008; Wright & Reise, 1997), so the presented research contributes additional value to knowledge about sociosexuality.

Firstly, it is important to mention that distinguishing LTMO and STMO from previous sexual behavior in present research differs from sociosexuality measured as a dimension from restricted to unrestricted sociosexual orientation in previous studies (e.g. Simpson & Gangestad, 1991a). When comparing the results, it's important to differentiate attitudes from behaviour, with opportunities being an important factor influencing actual behaviour (Jackson & Kirkpatrick, 2007). With that in mind, we observed LTMO and STMO separately, together with their relationship with sensation seeking and personality traits to gain a better insight in sociosexuality.

The results have shown that people who are more extroverted and perceive themselves more intellectual and open to new experiences tend to be more prone to STMO which is an expected result when compared to previous research (Barnes, Malamuth, & Check, 1984; Schmitt & Shackelford, 2008). Schmitt and Shackelford (2008) demonstrated that positive and significant link between extraversion and STMO was the most consistent one for any world region, including Eastern Europe. In the presented study, conducted in Croatia, that link remains consistent but was not as strong as expected. Moreover, a significant association emerged between extraversion and LTMO as well. So far, extraversion was found to be positively associated only with STMO, but not with LTMO (Del Giudice et al., 2014; Eysenck & Eysenck, 1971; Schmitt & Shackelford, 2008). Some differences in results regarding relationship between extraversion and both mating orientations might occur due to usage of BFAS for measuring personality traits. In constructing the BFAS, extraversion originally consisted of three factors. DeYoung et al. (2007) excluded Excitement Seeking form further analysis of extraversion aspects in order to examine its loadings in the two-factor solution, which resulted with enthusiasm and assertiveness as two aspects of extraversion. Given that sensation seeking was observed as a separate construct with its own measurement, it's possible that the relationship between extraversion and STMO didn't emerge as strong as expected, because the relationship between STMO and SS was the one responsible for the significance in the research so far because it was being included as a part of measurement of extraversion.

Furthermore, the study conducted on Eastern European sample, found openness positively associated with most measures of STMO, but not with the LTMO ones (Schmitt & Shackelford, 2008). A positive association between extraversion and openness/intellect with both mating orientations exists in the Croatian sample, which is not so surprising having in mind that involvement in any kind of new relationship, with high level of intimacy, requires some level of openness to new experiences and extraversion. Previous research also suggests that people prone to STMO are less conscientiousness and less agreeable (Barnes et al., 1984; Del Giudice et al., 2014) which was also supported as well as hypothesis that people prone to LTMO would show higher agreeableness and conscientiousness (Jones, 2017).

When comparing the obtained associations with both mating orientations, positive association between agreeableness and conscientiousness and LTMO on the one side, and a negative association of those traits with STMO on the other, is a clear distinction between two mating orientations which was also a result consistent with the ones obtained research so far (Del Giudice et al., 2014; Eysenck & Eysenck, 1971; Schmitt & Shackelford, 2008). Furthermore, since previous studies found behavioral expressions of SS in various risk-taking behaviors (e.g. sexual behavior), and linked SS with different aspects of human life (e.g. social and marital relationships; Bratko & Butković, 2003), we further explored the relationship between

SS and mating orientations. Regarding relationship between sensation seeking and mating orientations, the results indicate that individuals with a lower desire for SS are more prone to engage in a sexual relationship with a long-term attitude. On the contrary, relatively strong correlation obtained between STMO and SS implies the importance of relationship between sensation seeking desire and willingness towards engaging in short-term sexual relations. When looking into how PBS, personality, and sensation seeking are connected, we can observe that correlations are relatively low, but existing between most of personality traits and PSB. People that were more open and experienced in their previous sexual behavior, were less conscientious and agreeable, but more extroverted and open with higher intellect.

Moreover, Simpson and Gangestad (1991b) demonstrated that gender accounts for a substantial amount of variation in sociosexuality, with males being more prone to unrestricted sociosexual orientation than females. More recent research also argues that the genders systematically differ much more in their desire and willingness to engage in short-term relationships than in their desire and willingness to engage in long-term relationships, not involving their previous sexual behaviour (Buss & Schmitt, 1993; Jackson & Kirkpatrick, 2007). Therefore, it is not surprising that gender became an insignificant predictor for LTMO after personality traits entered the analysis, which also shows the importance of personality traits above gender in explaining LTMO. Openness/intellect became a significant predictor for LTMO in the final step of the analysis, even above and beyond SS. Personality traits emerged as an important predictor for STMO as well, but after SS entered, conscientiousness and extraversion became insignificant. Nevertheless, gender seems to have an important role in STMO where male participants obtained a higher score than female participants. Regarding gender differences in LTMO and STMO, this study supports previous research with males being more prone to STMO than females. It supports recent studies that show how man and women differ more regarding STMO than LTMO (Buss & Schmitt, 1993; Jackson & Kirkpatrick, 2007). From the evolutionary point of view, the results reflect that men are more prone to engaging in short-term relationship because it is beneficial in expanding their chances in directly expanding the number of their offspring (Buss, 2019). On the other hand, evolutionary theory suggests that women are more prone to long term relationships (Buss, 2019), but since gender was not significant in explaining proneness to LTMO in this research, gender differences remain to be of interest for some further research.

When the participants were grouped based upon their relationship status, the results showed that the participants that were single are more prone to STMO than participants that are in a relationship. On the other hand, the participants that were in a relationship tend to be more prone to LTMO than single participants. Those results were expected based upon previous research suggesting that individuals in a relationship have more restricted desires and slightly higher unrestricted behaviour than those that are single (Penke & Asendorpf, 2008). Between the two groups of participants there is no difference regarding PSB. The majority of previous research focuses on the difference between restricted and unrestricted sociosexual orientation that includes previous sexual behavior. Based upon results obtained in this research, there is no difference in PSB between the participants that were in a relationship and the ones that were not. Therefore, the difference between the groups seems to be more significant when previous sexual behavior is excluded, and analysis is conducted only on LTMO and STMO.

A potential reason for the results not being more in line with previous research may be partly methodical. Each personality trait in BFAS consists of two separate aspects for which we assumed to perhaps further explain the role of personality in sociosexuality and sensation seeking more than personality traits themselves. But, when observing the items used for measurement of each aspect, we suggest that aspects do not grasp the whole trait. For example, conscientiousness didn't appear as significant as expected because, when looking on an aspect level, conscientiousness consists of orderliness and organization. Therefore, we believe that the items do not properly describe variables regarding relationship with other people, which is crucial for this study. Further research should include some other measure of personality to gain a more

accurate understanding the results. Instruments that can measure not only general personality traits, but personality on a facet level can be more valuable than BFAS for this type of research. Moreover, constructs such as self-esteem and narcissism can be interesting and helpful in gaining a deeper insight in the relationship between personality and mating orientations. Further research conducted in more objective manner could surely be of additional value. The results obtained can be used in therapy, counseling and coaching to help everyday problems that emerge from intimate human relationships.

Conclusion

The present research provides a better understanding of sociosexuality and supports distinguishing attitudes towards sexual behavior from actual behavior. There is a clear distinction in how the same set of predictors contributes to the explanation of each of the mating orientations. Higher agreeableness, extraversion, and openness/intellect with lower desire of SS significantly predict a positive attitude towards LTMO. Being a man, having lower agreeableness, but higher openness/intellect and desire for sensation seeking can significantly predict positive attitude towards engaging in short-term sexual relationships. Sensation seeking and gender appeared to be important predictors of short-term attitudes, with males being more prone to engage in that kind of relationship. Moreover, when relationship status is considered, participants that are in relationship tend to be more prone to LTMO while participants that are single seem to be more prone to STMO. The differences obtained in roles that personality and sensation seeking have in long- and short-term mating orientations provide an interesting direction for future research. The results imply that there is much more to understanding human sociosexuality than initially assumed.

References

- Bailey, J. M., Gaulin, S., Agyei, Y., & Glaude, B. A. (1994). Effects of gender and sexual orientation on evolutionary relevant aspects of human mating psychology. *Journal of personality and social psychology*, 66, 1081-1093.
- Barnes, G. E., Malamuth, N. N., & Check, J. V. P. (1984). Personality and sexuality. *Personality and individual differences*, 5(2), 159-172.
- Bratko, D., & Butković, A. (2003). Family study of sensation seeking. *Personality and individual differences*, 35, 1559-1570.
- Buss, D. M. (2019). *Evolutionary psychology: The new science of the mind*, 6th edition. Routledge: Taylor and Frances.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: an evolutionary perspective on human mating. *Psychological review*, 100(2), 204.
- Del Giudice, M., Klimczuk, A. C. E., Traficante, D. M., & Maestripieri, D. (2014). Autistic-like and schizotypal traits in a life history perspective: Diametrical associations with impulsivity, sensation seeking, and sociosexual behavior. *Evolution and human behavior*, 35, 415-424.
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of personality and social psychology*, 93(5), 880.
- Donohew, L., Zimmerman, R., Cupp, P. S., Novak, S., Colon, S., & Abell, R. (2000). Sensation seeking, impulsive

- decision-making, and risky sex: Implications for risk-taking and design of interventions. *Personality and individual differences*, 28, 1079-1091.
- Eysenck, S. B. G., & Eysenck, H. J. (1971). Attitudes to sex, personality and lie scale scores. *Perceptual and motor skills*, 33, 216-218.
- Eysenck, S., & Zuckerman, M. (1978). The relationship between sensation seeking and Eysenck's dimensions of personality. *British journal of psychology*, 69, 483-487.
- Figueredo, A. J., Cuthbertson, A. M., Kauffman, I. A., Weil, E., & Gladden, P. R. (2012). The interplay of behavioral dispositions and cognitive abilities: Sociosexual orientation, emotional intelligence, executive functions and life history strategy. *Temas em psicologia*, 20(1), 87-100.
- Hoyle, R. H., Fejfar, M. C., & Miller, J. D. (2000). Personality and sexual risk taking: A quantitative review. *Journal of personality*, 68(6), 1203-1231.
- Jackson, J. J., & Kirkpatrick, L. A. (2007). Structure and measurement of human mating strategies: Toward a multidimensional model of sociosexuality. *Evolution and Human Behaviour*, 28, 382-391.
- Jones, D. N. (2017). Establishing the distinctiveness of relationship variables using the Big Five and self-esteem. *Personality and individual differences*, 104, 393-396.
- Kardum, I., Gračanin, A., & Hudek-Knežević, J. (2006). Odnos crta ličnosti i stilova privrženosti s različitim aspektima seksualnosti kod žena i muškaraca [Relations of personality traits and attachment styles with different aspects of sexuality in men and women]. *Psiholgijske teme*, 15(1), 101-128.
- Nikolić, M., Šimić, N., Bubić, L., & Pavela, I. (2016). Upitnik socioseksualne orijentacije [Sociosexual Orientation Inventory]. In: I. Tucak Junaković, V. Čubela-Adorić, I. Burić, & A. Proroković (Eds.), *Zbirka psiholgijskih skala i upitnika* (pp. 85-94). Zadar: Sveučilište u Zadru.
- Penke, L. (2007). Approaches to an evolutionary personality psychology: The case of sociosexuality. Dissertation. Berlin: Faculty of mathematics and science II of Humboldt University.
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of personality and social psychology*, 95(5), 1113-1135.
- Schmitt, D. P. (2004). The big five related to risky sexual behavior across 10 world regions: Differential personality associations of sexual promiscuity and relationship infidelity. *European journal of personality*, 18, 301-319.
- Schmitt, D. P., & Shackelford, T. K. (2008). Big five traits related to short-term mating: From personality to promiscuity across 46 nations. *Evolutionary psychology*, 6(2), 246-282.
- Simpson, J.A., & Gangestad, S.W. (1991a). Personality and sexuality: Empirical relations and an integrative theoretical model. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 71-92). Hillsdale, NJ: Erlbaum.
- Simpson, J.A., & Gangestad, S.W. (1991b). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of personality and social psychology*, 60(6), 870-883.
- Strouts, P. H., Brase, G. L., & Dillon, H. M. (2017). Personality and evolutionary strategies: The relationship between HEXACO traits, mate value, life history strategy, and sociosexuality. *Personality and individual differences*, 115(1), 128-132.
- Turchik, J.A., Garske, J.P., Probst, D.R., & Irvin, C.R. (2010). Personality, sexuality, and substance use as predictors of sexual risk taking in college students. *Journal of sex research*, 47(5), 411-419.
- Webster, G. D., & Bryan, A. (2007). Sociosexual attitudes and behaviors: Why two factors are better than one. *Journal of research in personality*, 41, 917-922.
- Webster, G. D., & Crysel, L. C. (2012). "Hit me, baby, one more time": Brief measures of impulsivity and sensation seeking and their prediction of blackjack bets and sexual promiscuity. *Journal of research in personality*, 46, 591-598.

- Wright, T. M., & Reise, S. P. (1997). Personality and unrestricted sexual behavior: Correlations of sociosexuality in Caucasian and Asian college students. *Journal of research in personality*, 31, 166-192.
- Zuckerman, M., Bone, R. N., Neary, R., Mangelsdorff, D., & Brustman, B. (1972). What is the sensation seeker? Personality trait and experience correlates of the sensation-seeking scales. *Journal of consulting and clinical psychology*, 39(2), 308-321.
- Zuckerman, M., Eysenck, S., & Eysenck, H. J. (1978). Sensation Seeking in England and America: Cross-cultural, Age and Sex Comparisons. *Journal of Consulting and Clinical Psychology*, 46(1), 139-149.
- Zuckerman, M., Kuhlman, D. M., Joireman, J., Teta, P., & Kraft, M. (1993). A comparison of three structural models for personality: The big three, the big five, and the alternative five. *Journal of personality and social psychology*, 65(4), 757-768.