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SELF-ESTEEM AND SOCIOSEXUALITY – DIFFERENCES IN SEXUAL BEHAVIOR AMONG PEOPLE DATING ONLINE

Abstract: The present study aimed to investigate the importance of self-esteem for sociosexual orientation and to compare groups of dating online users in terms of engaging in casual sex, performed in one night stand (ONS) and friends with benefit (FWB). This issue seems particularly important in the context of psychosexual health.

The exploratory study was conducted online among 416 adults who have participated in online dating. The Rosenberg Self-Esteem Scale (RSES), the revised Sociosexual Orientation Inventory (SOI-R), the author's questionnaire, concerning having experiences in ONS and FWB, and motives for entering into expected types of relationships were used. The Kruskal-Wallis H test with post hoc pairwise comparisons.

A statistically significant negative correlation between self-esteem and sociosexual orientation concerned the sociosexual attitude subscale. Differences were found between those engaging in ONS and FWB types of relationships. Those who engaged only in FWB had lower SOI-R scores than those who had only ONS experiences and both. Such results suggest that these relationships should be considered to be disparate and different functions should be attributed to them. Given the differences, it will be possible to use these results to support the design of public health interventions and reduce online sexual risk behavior.

Keywords: *self-esteem, online dating, sociosexual orientation, casual sexual relationships, one night stand, friends with benefits*

Dating apps and websites are a popular tool for casual dating (Weiser, Niehuis, Flora, Punyanunt-Carter, Arias & Baird, 2018; Botnen, Bendixen, Grøntvedt & Kennair, 2018) and sexual encounters to occur (Kasim & Rozi, 2019). The establishment of non-committal sexual relations, can, however, carry certain consequences for the sexual and mental health of users (Bersamin et al., 2014; Napper, Montes, Kenney & LaBrie, 2016; Wesche, Lefkowitz & Vasilenko, 2020). However, a variety of factors can influence these sexual patterns (Poerwandari & Berliana, 2021), play different functions (Timmermans & Courtois, 2018; Vrangalova, 2015), resulting in complex outcomes of casual sex (Garga et al., 2021; Couch & Liamputtong, 2008;

McKeen, Anderson & Mitchell, 2022). The construct that comprises individual differences in willingness to engage casual sex is sociosexuality (Kinsey, Pomeroy & Martin, 1948). Sociosexuality, “a dimension of personality that describes people’s comfort with and preference for sexual activity in the absence of love or commitment” (American Psychological Association, n.d.) is the main predictor of casual sex in Tinder users (Ciocca et al., 2020) and self-esteem correlates with the number of sexual relationships established. It seems reasonable to explore whether these variables encourage users of dating apps and websites to engage in sexual activity (without exclusivity and commitment to a romantic relationship).



THEORETICAL BACKGROUND

Dating online, casual sexual relationships, and sociosexual orientation

It has become relatively popular to believe that dating applications and websites are used to make short-term relationships (*one night stands*) and foster infidelity (Parmar, Karia, Shah, Desousa, 2019; Alexopoulos, Timmermans, McNallie, 2020). There are scientific reports that confirm the above theory (Weiser, et. al, 2018; Botnen et al., 2018). On the other hand, there are research reports that show that relationships established via the Internet do not differ from those made in the offline world. Their character does not have to be superficial and focused on sex only, these relationships can be full of commitment (Potarca, 2020) and last in the long term (Erevik, Kristensen, Torsheim, Vedaa, Pallesen, 2020).

In order to decide whether users of dating applications and websites establish deep emotional ties or only strive for short-term acquaintances for one night, it is worth referring to studies that take into account the importance of the motivation to use dating websites. The search for an affectionate and / or sexual partner remains an important motive for people to create an online dating account. Such findings indicate that Tinder is not merely a “scoring application” as is often assumed in the public discourse. It may be that sexual contact will replace the traditional way of dating and getting to know each other, eventually leading to a romantic relationship (Timmermans, Courtois, 2018).

Sociosexual orientation may be a primary predictor of differences in the pursuit of casual dating. It refers to “individual differences in willingness to engage in casual sexual relationships” (Simpson & Gangestad, 1991). Several types of casual sexual relationships can be distinguished: one night stands, friends with benefits, booty calls, fuck buddies). They also have different functions: sexual gratification, trial run, placeholder, and socioemotional support (Jonason, 2013).

Sociosexuality influences the motivations of Tinder users (Botnen et al., 2018; Sevi, Aral & Eskenazi, 2018; Hallam, De Backer, Fisher, Walrave, 2018; Grøntvedt, Bendixen, Botnen & Kennair, 2020). The less restrictive the sociosexual attitude has been reported in dating app users, the greater the willingness to achieve casual sex (Peter & Valkenburg, 2007; Botnen et al., 2018; Barrada, Castro, Fernández del Río & Ramos-Villagrasa, 2021, Shapiro, et al., 2017). Depending on the study, seeking a casual sexual relationship is indicated by about 20% (one night stands experiences) (Sumter, Vandenbosch & Ligtenberg, 2017; Grøntvedt et al., 2020), 50% (sexual encounters) (Strugo & Muise, 2019) to almost 66% (hookup experience with sexual experience) (Lefebvre, 2018) of users of dating apps. It is quite difficult to judge whether these acquaintanceships lasted (as friends with benefits) or were only a one-night experience.

The role of self-esteem in dating and engaging in sexual behavior

The users of dating applications and websites are distinguished by various characteristics: social, demographic, psychological or psychosexual. They are also compared with people who do not use the services of dating applications and websites (see review studies by Barrada and Castro (2020).

Most often, it is difficult to clearly identify specific features that define any of these groups. For example, in part of the conducted research no significant differences were found between the group of users of dating applications and websites and people who do not undertake such activities (Aretz, Demuth, Schmidt, Vierlein, 2010; Kim, Kwon, Lee, 2009). However, reports are available where such differences have been documented (Erevik et al., 2020). According to Barrada and Castro (2020) a significant part of the existing literature leads to the conclusion that the personality role of the users of dating applications and websites is unclear. The matter is further complicated by the fact that people who use online dating are not a homogeneous group, and the studied variables appear in very different contexts, not infrequently indicating ambiguous results.

The applications can function both as a source of self-esteem (e.g. having a large number of matches) (Orosz, Benyó, Berkes, Nikoletti, Gál, Tóth-Király, Bóthe, 2018), and even serve this purpose – strengthening self-esteem is sometimes one of the reasons why people decide to set up a dating account (Timmermans, De Caluwé, 2017b), which may correlate with problematic use of such applications, e.g. Tinder (Bonilla-Zorita, Griffiths, Kuss, 2021). On the other hand, the use of a dating application and website can be a source of frustration related to the need for a relationship, which was the strongest predictor of improving self-esteem through the use of a dating application (Orosz et al. 2018).

Self-esteem as a variable may also correlate with: the presentation of oneself on the dating portal and application – also in the context of fraud in this regard (Ranzini, Lutz, 2017), overload related to the choice of a partner and fear of being single (Thomas, Binder, Matthes, 2022), perceiving one’s own value as a partner (in a relationship, but also on the matrimonial market) (Brase, Dillon, 2022), (dis) satisfaction with one’s body (Strubel, Petrie, 2017), anti-social behavior (Duncan, March, 2019), as well as in the context of the number of partners (Schmitt, Jonason, 2019) and sexual permissivism (Gatter, Hodgkinson, 2016). Successful relationship establishment, including sexual relationships, has been linked to enhanced self-esteem and improved mood (Timmermans & De Caluwé, 2017; Orosz et al., 2018; Bandinelli & Bandinelli, 2021).

The interplay of self-esteem and engaging in hook-up behavior on psychological well-being remains a subject of investigation. Lower self-esteem may correlate with involvement in risky sexual practices among adolescents (Ethier et al., 2006) or stem from such behaviors (Paul, McManus & Hayes, 2000; Bersamin et al., 2014), particularly when non-autonomous motives for sex are

present (Townsend, Jonason & Wasserman, 2020; Vrangalova, 2015). The role of gender appears to be important - high self-esteem in women may be associated with fewer sexual experiences (Fielder, Walsh, Carey & Carey, 2013), and intense casual sex may positively correlate with self-esteem in men (Schmitt, 2005) or at least not lead to lower self-esteem (Eisenberg, Ackard, Resnick & Neumark-Sztainer, 2009). Some reports suggest that “hookups” have no significant effect on self-esteem among either sex (Fielder & Carey, 2010).

Self-esteem and sociosexual orientation in the context of the online dating

Dating apps and portals may serve different functions. The recreational hypothesis suggests sexually permissive individuals are more inclined to seek casual partners, while the compensatory hypothesis implies a compensatory role for dating apps (Bonilla-Zorita, Griffiths & Kuss, 2021; Toma, 2022). In both cases, dating portals and apps facilitate sexual relationships, potentially linked to users' self-esteem. However, the connection between sociosexuality and self-esteem remains unclear. Research has documented a positive association between these variables or subjective mate value, a concept linked to self-esteem (Vrangalova & Ong, 2014; Penke & Asendorpf, 2008), while also highlighting gender differences. High Sociosexuality Orientation Index (SOI) scores correlate with elevated self-esteem in men, but not necessarily in women. Men often find it easier to engage in short-term sexual relationships, and those effective in doing so and having multiple partners tend to possess high self-esteem (Schmitt & Jonason, 2019; Clark, 2006) or a higher mate value (Gomuła, Nowak-Szczepanska, Danel, 2014). Women with high SOI scores report negative mood and unpleasant emotions (Schmitt & Jonason, 2019; Clark, 2006). Notably, studies indicate that there might be no significant relationship between self-esteem and sexual permissiveness or short-term mating (Sakaluk, Kim, Campbell, Baxter & Impett, 2020; Jonason, Teicher & Schmitt, 2011).

Current study

Noting this ambiguity (the role of self-esteem and sociosexual orientation in engaging in casual sexual encounters) provided the theoretical justification for undertaking the present research, which was, however, exploratory in its nature. It was important to explore differences in self-esteem and sociosexual orientation of online dating users with different dating motives and within groups distinguished on the basis of engaging (or not) in casual sexual encounters (maintained in ONS and FWB relationships).

METHOD

Participants and procedure

The study was conducted online in December 2021. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experi-

mentation and with the Helsinki Declaration of 1975, as revised in 2008. The purpose of the study was purely scientific and the data collected were used in scientific work, including the development of scientific publications.

The study involved adults who voluntarily consented to participate in the study and could withdraw this consent at any time. A description of the study and how the data would be used was provided on the welcome screen and contact details for the researcher were provided.

The participants have been recruited via social media, among members of thematic groups on Facebook, among students as well as other people, who acquired knowledge about the conducted research. The participants received a link to the survey on the Profitest server. The survey took about 10 minutes to complete. The survey did not distinguish between users of dating apps and users of portals, due to the fact that participation of people of different ages was assumed, which corresponds to the preferences of different groups regarding the choice of application or dating site.

Cases of lack of experience in online dating (N=14) and missing data (N=5) were removed. 416 surveys were included in the analyses. Survey participants were eligible to participate in a drawing for a voucher worth PLN 100.

Table 1 presents the sociodemographic variables of the group of respondents, their sexual behaviors and motives for dating. The vast majority of the respondents were women (81.57%), men (17.97%), and non-binary (0.46%). The percentage of the respondents in the previously specified age groups was established. The most numerous groups are young adults, i.e. people between 18 and 24 years of age (38.25%) and people between 25 and 34 years of age (48.85%). The vast majority of the respondents were singles (64.98%), admitted to being in a romantic relationship (26.96%), or in an undefined relationship (7.83%). Online dating people have used the following applications: Tinder – (85.94%), Badoo – (46.77%), Sympatia – (21.66%), Facebook Dating – (28.57%), Bumble – (7.37%), Other (9.68%).

Measures

The Rosenberg Self-Esteem Scale (RSES) developed by Rosenberg (1965) in a Polish version by Dzwonkowska, Lachowicz-Tabaczek and Łaguna (2008) was used for measuring global self-esteem. The RSES consists of 10 statements (e.g., I feel that I have a number of good qualities), which are assessed using a 4-point Likert scale ranging from 1 (strongly agree) to (strongly disagree). Five items are reverse-scored. Higher scores indicate higher self-esteem. Cronbach's alpha for the RSES was 0.83.

The revised Sociosexual Orientation Inventory (SOI-R) with 5-point rating scales by Penke and Asendorpf (2008) in its Polish version by Jankowski (2016) is a 9-item self-report questionnaire for measuring sociosexual orientation in three facets, i.e., behavior, attitude, and desire. The Behavior scale consists of three statements related to questions about the number of sexual partners. The Attitude scale has three statements (e.g., I can imagine myself being comfortable and enjoying

Table 1. Characteristics of the group of respondents

| | N | % |
|---|-----|--------|
| Gender | | |
| Woman | 344 | 82,69% |
| Man | 71 | 17,07% |
| Non-binary | 1 | 0,24% |
| Education | | |
| Higher | 267 | 64,18% |
| Secondary | 139 | 33,41% |
| Others | 10 | 2,40% |
| Age | | |
| 18 – 24 years | 155 | 37,26% |
| 25 – 34 years | 209 | 50,24% |
| More than 34 years | 52 | 12,5% |
| Relationship status | | |
| Single | 274 | 65,87% |
| Romantic relationship | 109 | 26,20% |
| Difficult to define | 33 | 7,93% |
| Sexual behaviors | | |
| One nights stands | 93 | 22,36% |
| Friends with benefits | 124 | 29,81% |
| Motives of Dating | | |
| Only creating a relationship | 268 | 64,42% |
| Other motives | 148 | 35,58% |
| Used dating apps and portals | | |
| Tinder | 358 | 85,94% |
| Badoo | 195 | 46,77% |
| Facebook Dating | 119 | 28,57% |
| Sympatia | 90 | 21,66% |
| Bumble | 31 | 7,37% |
| Other (Grindr, OkCupid, Lovely, Fellow) | 40 | 9,68% |

“casual” sex with different partners) concerning attitude towards and acceptance of own accidental sexual contacts. The Desire scale has also three statements (e.g., How often do you experience sexual arousal when you are in contact with someone you are not in a committed romantic relationship with?) and is associated with the levels of the fantasies about sexual activity with people with whom the respondent is not in a relationship. Some items are reverse-scored. A total score of global sociosexual orientation can also be calculated. Higher scores indicate higher sociosexuality. Cronbach’s alpha for the SOI-R was 0.77 (subscale reliability oscillated from 0.76 to 0.78).

Experiences of engaging in casual sexual relationships. Only two of the four relationships (Wentland & Reissing, 2014) were selected: ONS (one night stands) and FWB (friends with benefits), as proposed by Dubé (et al., 2017). ONS and FWB are also abbreviations that remain familiar to Polish users looking at the growing number of articles in the popular media. The questions explored the issue of frequency of involvement in an ONS type of relationship (“What are your experiences of one night stands, i.e. one-off sex encounters, using a dating app or websites?”) and FWB (What are your experiences of engaging in a friends with benefits type of relationship, i.e. friendships based on mutual affection and sexual activity, using a dating app or websites?). The suggested responses were to indicate the frequency of entering a particular type of relationship from the available cafeteria. It was decided to classify users’ responses as ‘has experience’ or ‘has no experience’ of entering into a particular type of relationship.

Motives for establishing the expected types of relationships, examined by formulating the question: “Which motive characterizes your experience of using a dating app or portal to the greatest extent?” together with a suggested answer cafeteria (e.g. seeking a relationship partner, establishing a casual relationship, seeking sexual experiences, etc.). For the purposes of the analysis, two main motives differentiating the group were distinguished: establishing a relationship and other motives.

Furthermore, the study used a proprietary questionnaire that controls gender, age, education, place of residence and emotional relationship.

Data Analysis

Count tables were analyzed, descriptive statistics and correlation analyses were performed, and differences between subgroups were sought using The Kruskal-Wallis H test with pairwise post hoc comparisons with Bonferroni correction was used in developing the results. Analyzing the values of skewness and kurtosis identified a normal distribution of the self-esteem (RSES) and sociosexuality (SOI-R), so it was decided to use parametric tests (Pearson’s R correlation). A multiple regression analysis was done using self-esteem as a predictor for the dependent variable SOI-R Attitude. In the case of experiences of engaging in casual sexual relationships, the distribution of the variables studied differed from normal, so a non-parametric test was used (The Kruskal-Wallis H test with pairwise post hoc comparisons with Bonferroni correction). In addition, effect size was counted (Brzeziński, 2004; Lenhard & Lenhard, 2016). A significance level of $p \leq 0.05$ was used in the statistical analysis. We perform the analyses using Statistica 13.3 and SPSS.

RESULTS

Descriptive analysis

Table 2 presents descriptive statistics on the distribution of psychological variables and the gender differences. Additionally, an attempt was made to describe the practice

Table 2. Descriptive statistics of the analyzed variables and gender differences

| Scales | Total sample (N = 416) | | | | | Females (N = 344) | | Males (N = 71) | | Gender differences by the U-test (p-value) | Effect size (Cohen's D) |
|-----------------|------------------------|-------|------|----------|----------|-------------------|------|----------------|------|--|-------------------------|
| | A | M | SD | Skewness | Kurtosis | M | SD | M | SD | | |
| SES Self-esteem | 0,89 | 21,04 | 6,91 | 0,36 | -0,60 | 20,70 | 7,12 | 22,59 | 5,61 | 0,011* | 0,29 |
| SOI-R Behavior | 0,82 | 5,78 | 2,79 | 1,12 | 0,83 | 5,71 | 2,71 | 6,17 | 3,14 | 0,356 | 0,16 |
| SOI-R Attitude | 0,81 | 9,08 | 3,72 | 0,03 | -1,12 | 8,90 | 3,77 | 10,00 | 3,37 | 0,022* | 0,22 |
| SOI-R Desire | 0,81 | 7,51 | 2,75 | 0,43 | -0,26 | 7,34 | 2,67 | 8,37 | 2,98 | 0,008** | 0,36 |
| SOI-R Total | 0,84 | 22,38 | 7,22 | 0,41 | -0,25 | 21,94 | 7,16 | 24,54 | 7,22 | 0,009** | 0,36 |

Note. * $p \leq 0.05$; ** $p \leq 0.01$; α – Cronbach's alpha.

of such behaviors as one night stands and friends with benefits among the respondents in order to then look for the interaction of these variables with the previously presented psychological variables.

Correlations

Males had higher levels of self-esteem and sociosexual orientation (Attitude, Desire and Total scores) than females. The effect size was small (Table 2), reaching the highest intensity within the SOI-R Attitude and Total scores (0.36). There were no differences in the SOI-R Behavior levels between these gender groups. A correlation analysis between the variables analyzed was performed. Due to the normal distribution of the variables, r-Pearson correlations were used (Table 3).

A statistically significant correlation between self-esteem and sociosexuality concerned the sociosexual attitude subscale. The results indicate that as self-esteem

increases, scores on the sociosexual attitude subscale decrease. Furthermore, statistically significant correlations between the sociosexual orientation subscales are evident.

The same variables were analyzed, but with the distinction of two subgroups: those who are looking for a relationship online and those who have different goals as to the type of relationship expected (Table 4).

Furthermore, a multiple regression analysis was done using self-esteem as a predictor for the dependent variable SOI-R Attitude (Table 5).

The results indicate that in the group of people who search online for a relationship, a negative correlation between self-esteem and sociosexual attitudes is confirmed, which was also visible in the whole group of people surveyed. Among those with motives other than finding a partner online, a new negative correlation is revealed, indicating that sociosexual behavior negatively correlates with self-esteem.

Table 3. Pearson correlations between self-esteem and sociosexual orientation in females (above diagonal) and males (below diagonal) and in total group

| Variables | Self-esteem | SOI-R Behavior | SOI-R Attitude | SOI-R Desire | SOI-R Total | Self-esteem (total group) |
|----------------|-------------|----------------|----------------|--------------|-------------|---------------------------|
| Self-esteem | – | -0,05 | -0,11* | 0,02 | -0,07 | - |
| SOI-R Behavior | -0,13 | – | 0,53*** | 0,31*** | 0,77*** | -0,06 |
| SOI-R Attitude | -0,14 | 0,42** | – | 0,36*** | 0,86*** | -0,10* |
| SOI-R Desire | -0,16 | 0,26* | 0,41** | – | 0,68*** | 0,01 |
| SOI-R Total | -0,19 | 0,74** | 0,82** | 0,72** | – | -0,07 |

Note. * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

Table 4. Pearson correlations between self-esteem and sociosexual orientation

| Variables | SES Self-esteem Group "creating a relationship" (N = 268) | SES Self-esteem Group "other motives" (N = 143) |
|----------------|---|---|
| SOI-R Behavior | 0,03 | -0,19* |
| SOI-R Attitude | -0,13* | -0,06 |
| SOI-R Desire | 0,02 | -0,05 |
| SOI-R Total | -0,05 | -0,13 |

Note. * $p \leq 0.05$

Table 5. Results of multiple regression analyses for the variable: sociosexual attitude

| Variables | β | St. error β | B | St. error B | t | p level |
|-------------|---------|-------------------|--------|-------------|--------|---------|
| Self-esteem | -0,100 | 0,049 | -0,054 | 0,026 | -2,041 | 0,042 |

Note. $R=0,100$; $R^2=0,010$; Correlated $R^2=0,008$; $F(1,414)=4,1644$; $p<0,05$.

Intergroup comparisons

A comparative analysis of self-esteem and sociosexual orientation was carried out in four groups, based on their involvement in the different types of relationships. In the group:

- ONS-, FWB- were those who had no experience with this type of relationship,
- ONS-, FWB+ were those with only friends with benefits experiences,
- ONS+, FWB- were those with only one night stands experience,
- ONS+, FWB+ were those with experience in both types of relationships.

The Kruskal–Wallis H test with pairwise post hoc comparisons with Bonferroni correction was used. In addition, the effect size was calculated for the differences explored. The highest result (0.459) was achieved in SOI-R Behavior, while in the other differences the effect size was small or not significant (Table 6).

is found in groups where users do not have such experiences, or in groups where only FWB experience exists. This option seems to be less risky.

DISCUSSION

A statistically significant correlation between self-esteem and sociosexuality concerned only the sociosexual attitude subscale. The results indicate that as self-esteem increases, scores on the sociosexual attitude subscale decrease. Negative correlation, between sociosexual attitude and self-esteem was statistically significant, its strength was small. Although, we noticed that self-esteem is a predictor for the sociosexual attitude. It was revealed at the level of the whole group, also for those seeking a relationship partner. On the other hand, in the group of people who did not declare only looking for a relationship partner, a different relationship was noticed. The lower the self-esteem, the higher the score on the sociosexual

Table 6. Comparative analysis of self-esteem and sociosexual orientation in four groups

| Scales (Variables) | Comparison Groups | | | | Kruskal– Wallis H test results | Post hoc com- parisons (sig- nificant dif- ferences be- tween groups) | Eta squared (η^2) |
|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|---|-----------------------------|
| | Group 1 ONS-, FWB- (N = 258) | Group 2 ONS-, FWB+ (N = 56) | Group 3 ONS+, FWB- (N = 34) | Group 4 ONS+, FWB+ (N = 68) | | | |
| | Median | | | | | | |
| SES Self-esteem | 21,0 | 22,0 | 21,0 | 20,0 | H (3) = 1,84, p = 0,606 | – | 0,003 |
| SOI-R Behavior | 4,0 | 6,0 | 8,0 | 9,0 | H (3) = 192,19, p < 0,001 | 4 > 1, 2; 3 > 1; 2 > 1 | 0,459 |
| SOI-R Attitude | 7,5 | 10,0 | 11,0 | 13,0 | H (3) = 78,85, p < 0,001 | 4 > 1, 2; 3 > 1; 2 > 1 | 0,184 |
| SOI-R Desire | 7,0 | 8,0 | 8,5 | 9,0 | H (3) = 47,15, p < 0,001 | 4 > 1, 2; 3 > 1 | 0,107 |
| SOI-R Total | 19,0 | 23,0 | 26,5 | 30,0 | H (3) = 152,24, p < 0,001 | 4 > 1, 2; 3 > 1, 2; 2 > 1 | 0,362 |

The above analysis did not show any differences in self-esteem between groups of people with ONS and FWB experiences. In contrast, those who had experience in this type of relationship manifested significantly higher scores on all subscales of the SOI-R than those who had not, but their effect sizes were often small. The differences revealed indicate that sociosexuality increases with involvement in riskier sexual behavior (manifested in an ONS-type relationship). Its lower level, on the other hand,

behavior scale. This relationship was low but showed statistical significance. There are two hypotheses in the literature on the role of self-esteem and sociosexual orientation: recreational (Peter & Valkenburg, 2007; Schmitt & Jonason, 2019; Clark, 2006) and compensatory (Bonilla-Zorita et al., 2021). The results obtained could provide a small indication of the compensatory role of engaging in casual relationships among those who were not exclusively looking for a relationship partner.

In literature, high SOI-R scores often correlate with elevated self-esteem in men, less so in women (Schmitt & Jonason, 2019; Clark, 2006). A gender-based study observed that men scored higher on SES and SOI-R scales than women (excluding sociosexual behavior subscale). Research suggests men are more comfortable with casual relationships (Neto, 2015; Mongeau et al., 2007), possibly aligning with lower self-esteem, noted in our study.

Sociosexual orientation's significance in non-committal relationships was confirmed in the study. Subjects experienced higher SOI-R scores with more ONS and FWB involvement. FWB-type connections had lower SOI-R scores than ONS, even approaching those without casual experiences. Such results suggest that these acquaintances should be considered differently, attributing different functions to them (Jonason, 2013). FWB is motivated by persisting in the relationship until someone better comes along. It can also be an opportunity to try being together before forming a relationship. In contrast, ONS-type relationship is related to the desire to satisfy a sexual need. Jonason's (2003) analyses revealed an overlap between these types of relationships and a blurring of the boundaries of what are considered one-night adventures and serious romantic relationships. Relationship formation, especially among those with less restrictive sociosexual views, does not necessarily involve going on a traditional date, but can be replaced by some form of physical contact, from kissing and petting to casual sex.

The fluidity in the transition from one type of relationship to another, their different functions, and the availability of attractive alternatives is reflected in sociocultural concepts of liquid or later modernity, but also in the theories of evolutionary psychology. The role of self-esteem in the sexual behavior of people using dating apps was found to be small in this study.

LIMITATIONS

The study has a number of limitations that need to be taken into account. The survey and tests were completed by 416 people, but an increase in the number of respondents could be beneficial for the representativeness of the sample, especially greater number of men. A weakness of the survey is the large disparity between the number of women (344 women) and men (71 men) surveyed. This is a fairly common problem of research in the field of social psychology (and beyond), as it is usually women who willingly agree to take part in the survey, unlike men who find it easier to refuse. The group of men, however, is not very small, thanks to the rather large number of people surveyed, which may account for the validity of the analyses. Although, this selection of respondents can not show the general trends that exist in the population. Another limitation of the survey is the research tools used. It would have been necessary to supplement them with, among others, e.g. The Mate Value Scale (Edlund & Sagarin, 2014), Tinder Motives Scale (Timmermans & De Caluwé, 2017), The SLCS-R Scale

and prepare additional questions regarding the function of ONS and FWB relationships.

The survey was conducted during the pandemic period. It is important to take these circumstances into account when drawing conclusions about the experience of respondents and the behavior of users of dating apps. Importantly, dating apps have not lost their popularity after the pandemic period and remain an attractive place to make all kinds of acquaintances.

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