


# Why Do People Watch Porn? An Evolutionary Perspective on the Reasons for Pornography Consumption

Vlad Burtăverde<sup>1</sup> , Peter K. Jonason<sup>2,3</sup>, Cezar Giosan<sup>1</sup>, and Cristina Ene<sup>1</sup>

## Abstract

We investigated the reasons for pornography consumption using a bottom-up approach (i.e., open-ended questionnaire) and proposed that those reasons would reflect a short-term mating orientation of individuals that watch pornography and a strategy that should help them to attract or maintain potential mates easier (i.e., a fitness increasing strategies) by enhancing their sexual knowledge through pornography watching. In Study 1 ( $N = 276$ ), relying on an open-ended questionnaire and a content analysis, we identified 78 reasons for why people claim to consume pornography. In Study 2 ( $N = 322$ ), we grouped those reasons into categories using a series of factor analyses, resulting in four dimensions of reasons for watching pornography: (1) increased sex drive, (2) enhancing sexual performance, (3) social and instrumental reasons, and (4) lack of relational and emotional skills. The content of these factors supported the idea that the reasons for consuming pornography are reflections of a short-term mating orientation and a way to enhance their sexual knowledge and performance. Individuals with higher scores on the dimensions of reasons for pornography consumptions had higher scores on the Dark Triad traits and sociosexuality, mate-value and slow life history strategies (in the case of enhancing sexual performance dimension). In Study 3 ( $N = 327$ ), we tested to what extent the factorial structure of the reasons for pornography consumption can be confirmed via Confirmatory factor analysis and tested the convergent validity of the reasons to consume pornography.

## Keywords

pornography consumption, evolutionary psychology, dark triad traits, sex differences, sociosexuality

Accepted: June 11, 2021

People watch pornographic videos frequently and at a progressively earlier age (Dines, 2010); pornography websites being among the top 50 most visited websites worldwide yearly (Alexa.com, 2020). Watching pornography (Franc et al., 2018) influences the attitudes, behavior, sexual practices of the viewer, including, but not limited to, their relationship satisfaction (Bergner & Bridges, 2002; Twohig & Crosby, 2010; Wright & Randall, 2012). As such, to better understand and understand the phenomenon of watching pornography, it is important to study the reasons why more than 90% of questioned adults engage in this activity (Hald, 2006). However, to date, researchers have mostly focused on the effects of pornography consumption (Hald & Malamuth, 2008), rather than the reasons that determine it. Relying only on the actual behavior of pornography consumption, or on the preferred pornographic content, can lead to a descriptive understanding of pornography consumption, which has a limited impact on unraveling the

causes of it. Instead, by studying the reasons for why people consume pornography, it becomes easier to identify the triggers of this behavior.

Young adults typically perceive pornography consumption as a venue for sexual exploration and learning about sexuality (Hare et al., 2015). Pornography is used for mood enhancement (e.g., to get entertained), coping (e.g., comforts when in a bad mood), emotional avoidance, and social reasons (e.g., to meet somebody; Franc et al., 2018; Reid et al., 2011). People also

<sup>1</sup> University of Bucharest, Bucuresti, Romania

<sup>2</sup> University of Padova, Veneto, Italy

<sup>3</sup> University of Cardinal Stefan Wyszyński, Warszawa, Poland

## Corresponding Author:

Vlad Burtăverde, Department of Psychology, University of Bucharest, Panduri 90, Bucharest, Romania.

Email: vlad.burtaverde@fpse.unibuc.ro



state that they watch pornographic content for sexual pleasure and enhancing offline sexuality (Bolshinsky & Gelkopf, 2019). Notwithstanding the growing body of research on the reasons of pornography watching, the study of reasons for watching pornographic content is disjointed, atheoretical, and phenomenological, with most of the research focusing on rather descriptive research aims (Hare et al., 2015). A strong theory would help to make sense of these disjointed and descriptive empirical findings and facilitate integration and replication (Muthukrishna & Heinrich, 2019).

Unlike the relatively scarce research into the reasons of watching pornography, the research on the actual *behavior* of watching pornography is more substantial, and guided by several theoretical perspectives, among which evolutionary ones such as sexual strategies theory (Salmon, 2012). An evolutionary perspective (Malamuth, 1996) sees pornography consumption as a consequence of an increased sex drive which is stronger in men than in women, because during ancestral times, increased sex drive would have promoted more reproductive fitness in men, the sex that is less obligated to offspring (Buss, 1995; Salmon, 2012; Salmon & Fisher, 2018; Salmon et al., 2019). Thus far, the evolutionary perspective has been typically used to explain the actual behavior of watching pornography and the type of content men and women watch (Salmon, 2012). The research on why people watch pornography is sparse, rather descriptive than explicative, and, as such, the understanding of the reasons of why people consume pornography is limited.

Sexual strategies theory (Buss & Schmitt, 1993; Schmitt, 2016), an evolutionary theory of human mating behavior, may explain some of the reasons why people watch pornography. Human mating strategies can range from a short-term to a long-term orientation (Gangestad & Simpson, 2000). Short-term mating is characterized by frequent casual sex, less emotional investment in romantic relationships, and having many sexual partners and experiences. In contrast, long-term mating is characterized by high emotional investment into a committed relationship (Buss, 2008). Men are more willing to engage in short-term mating, mainly because, for men, having multiple affairs with different partners can increase the likelihood that their genes will be passed on to the next generation (Schmitt et al., 2001). However, women may also be oriented to short-term mating, as there are evolutionary benefits in this regard (see the mate switching hypothesis; Greiling & Buss, 2000). The evolutionary approach does not assume that the sexual psychologies of each sex are non-overlapping nor a simplistic “Venus and Mars” theory of sex differences. Instead such an approach suggests that sex differences are meant to describe the average man and woman as opposed to individual and potentially exceptional cases. The idea that the reasons to watch pornography may be a reflection of a short-term mating strategy is supported by the link between “pornotopia”—the tendency to portray and reduce reality to sexual activity and cues, as in the scenarios of the most pornographic movies—and short-term mating, where this type of reality perception is specific to people high on sociosexuality (Salmon & Symons, 2003).

We posit that the reasons for pornography consumption represent reflections of a short-term mating orientation. The main characteristic of short-term mating is the desire for and engagement in casual sex (Penke & Asendorpf, 2008). Because ancestral humans benefited from engaging in casual sex (e.g., facilitated their reproductive success; Buss, 2008), we can see this behavior prevalent in many individuals today (e.g., prefer one-night stands; Jonason et al., 2011, 2012). Consequently, we argue that the reasons reported by individuals who watch pornographic materials should reflect their short-term mating orientation. However, engaging in casual sex requires extensive effort invested in finding a mate and successfully engaging in sex, especially in the case of men. Because most of the content from pornographic movies contain sexual acts and scenes that induce psychological moods and emotions similar to those elicited during casual sex and sexual intercourse (Hald & Malamuth, 2008), an argument can be made that pornography consumption serves as a substitute for casual sex. As such, individuals that are oriented to short-term mating may watch pornographic movies to satisfy their need for the kind of stimulation that they usually get during casual sex, as this is a more convenient and less costly practice. However, because watching pornography in and of itself cannot lead to reproductive success, the reasons for pornographic consumption that represent a reflection of a short-term mating orientation should be understood as a by-product (i.e., it clusters around adaptations such as short-term mating orientation), not as an adaptation. Consequently, we expect that the reasons for watching pornography represent reflections of a short-term mating orientation.

A short-term mating orientation is also reflected in behavioral syndromes, mostly represented by personality traits, such as the Dark Triad traits or narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002), which may be linked to a short-term mating orientation (Jonason et al., 2009) and could facilitate reproductive success (Carter et al., 2018). People who watch pornographic content typically score low on agreeableness and conscientiousness (Egan & Parmar, 2013), which are personality correlates of the Dark Triad traits (Lee & Ashton, 2014). Also, people high in narcissism and psychopathy engage in frequent pornography use (Kasper et al., 2015; Paul, 2009). Therefore, individuals characterized by high levels of the Dark Triad traits have a strong interest and desire for sex (Baughman et al., 2014) and sexual situations (Jonason & Shermna, 2020). People high on the Dark Triad traits have more sexual fantasies (Baughman et al., 2014), a high frequency of sexual dreams (Lyons et al., 2019), limited sexual disgust (Burtaverde, Jonason, Ene, & Istrate, 2021), prefer one-night stands and friends-with-benefits relationships (Jonason et al., 2012), are unfaithful in their romantic relationships (Jones & Weiser, 2014), use various tools, such as Tinder to engage in casual sex (Timmermans et al., 2018), and engage in sexting activities (Clancy et al., 2019). Therefore, we expect that individuals high on the Dark Triad traits would endorse the reasons for watching pornography more strongly.

Men have higher scores on the Dark Triad traits compared to women (Jonason et al., 2017). They are also characterized by short-term mating strategies to a larger extent than women (Jonason et al., 2009), as well as higher sex drive (Baughman et al., 2014). As such, we expect that men should endorse the reasons for watching pornography more strongly, and the Dark Triad traits will mediate the relationship between sex and the reasons to consume pornography just as the traits mediate sex differences in interest in casual sex, for example (Jonason et al., 2009).

From an evolutionary perspective, we consider that the reasons for watching pornography can also be understood as reflections of fitness strategies, that is tactics that enhance the probability of retaining a mate and, implicitly, the probability of reproduction. One in two adults faces mating difficulties and report poor mating performance, as there are essential evolutionary mismatches that affect mating performance (e.g., mating was, to a great extent, planned and controlled in the family; Apostolou, 2007; Apostolou et al., 2018). Through watching pornography, people may enhance their knowledge about sex and sexuality, which can be, in turn, used in their sex life. As such, they may improve their chances of maintaining a mate because of adequate sexual satisfaction in their romantic relationship.

The effort invested in long-term romantic relationship can be explained through the lens of life history strategies (Figueredo et al., 2006). Adopting a slow or fast strategy in the case of humans depends on the characteristics of childhood environments. Childhood environments characterized by harshness and unpredictability lead to individuals developing a fast life history strategy (Belsky et al., 2010). Developing a fast life history strategy, which implies early reproduction, offers evolutionary advantages as harsh environments mean life span is shorter (Griskevicius et al., 2013). The behavioral characteristics of individuals characterized by fast life history strategies imply the orientation toward short-term gains and an opportunistic lifestyle, sexual variety, little parental investment, disregard for social rules, impulsivity, little social support, and extensive risk-taking (Figueredo et al., 2006). In contrast, environments characterized by less harshness determine individuals to adopt a slow life history strategy as in such environments, life span is longer and allows individuals to invest in their personal and social development and in their offspring (Figueredo et al., 2006). The behavioral characteristics of individuals characterized by slow life history strategies imply long-term planning, monogamy, compliance with social rules, high parental investment, and risk avoidance (Figueredo et al., 2006).

Individuals characterized by slow life history strategies invest more effort in long-term romantic relationships (Giosan et al., 2018). As such, these people may try to perfect their sexual skills to better signal their “value” to their partners during sexual intercourse. This, in turn, may increase the odds of a successful future romantic relationship. Consequently, we expect that at least some of the reasons for pornography consumption reflect a fitness increasing strategy and are related to

correlates of evolutionary fitness such as mate value and slow life history strategies (Figueredo et al., 2006; Giosan et al., 2018).

From the arguments mentioned above, it can be seen that we described reasons to consume pornography as a reflection of a fast life history strategy (expressed as a short-term mating orientation) and as a reflection of a slow life history strategy as well. This does not mean that the aim of the research is exploratory. We argued that some of the reasons to watch pornography might be understood as a manifestation of an increased sex drive, which is specific to individuals characterized by fast life history strategies oriented to short-term mating. Moreover, we also argued that other reasons to consume pornography might be understood as a manifestation of the desire to learn new things about sex and sexuality that may be used in an actual long-term romantic relationship, which is specific to people characterized by slow life history strategies.

We conducted three studies to elucidate the reasons for pornography consumption and test our above-mentioned predictions. In Study 1, we aimed to identify the perceived reasons for pornography consumption, using a qualitative design, relying on the act-nomination technique. In Study 2, we examined the nature of these reasons by classifying them using a series of exploratory factor analyses and analyzing to what extent they can be understood as reflections of a short-term mating orientation and a fitness increasing strategy. In Study 3, we tested to what extent the factorial structure of the reasons for pornography consumption can be confirmed via Confirmatory factor analysis and tested the convergent validity of the reasons to consume pornography.

## Study 1: Why Do People Say They Watch Porn?

The primary objective of Study 1 was to identify the perceived reasons for pornography consumption, using a qualitative design. Although in-depth interviews are preferred to open-ended questionnaires for qualitative research purposes, some participants may not feel comfortable interacting with the interviewer (Liamputtong, 2009), especially to discuss taboo topics, such as pornography (Reid et al., 2011). Therefore, we relied on an open-ended questionnaire to gather information about the reasons people have for watching pornography, relying on the act-nomination technique (Jonason & Buss, 2012). These reasons are later converted to quantitative responses to form a mixed methods study.

## Method

### Participants and Procedure

The participants were 276 undergraduate psychology students ( $M_{age} = 20.34$ ,  $SD = 3.81$ , 81.9% females) recruited from a Personality Assessment course. The inclusion criterion was endorsement of pornography consumption, assessed via one item (i.e., “Do you watch pornography?”). Those who endorsed

this item were included in the study. We informed all the participants about the nature of the study and obtained their consent for participation. We administered the measures online using Google Forms (anonymous—without participant identification). All participants were offered one extra credit point for their Personality Assessment course. The ethical approval for this study was obtained from the University of Bucharest.

### Measures

*The open-ended questionnaire.* The open-ended questionnaire contained one question: “Why do you watch pornography?” They were instructed to think about personal reasons, not reasons they thought others watch it for (e.g., *Think about why you watch pornographic movies, without considering general reasons why people may watch them*). All the participants were asked to list three most important reasons for watching pornography. They also filled in the demographic information. The average completion time was approximately 7 minutes ( $SD = 3.43$ ).

### Results & Discussion

The first author analyzed the responses of the participants. The first and last authors read the answers and created a list with all the reasons for watching pornography, as reported by the participants, eliminating identical or closely similar reasons. As there are differences in pornography consumption (Salmon, 2012), we first analyzed the reasons reported by men, and then the reasons reported by women. We identified 42 reasons for pornography consumption reported by men and 61 reasons for pornography consumption reported by women (Appendix B). Next, we conducted a qualitative content analysis on the identified reasons men and women reported to identify the general content themes of reasons for pornography consumption. In the case of men, we can see that each of the reasons can be considered to represent one of the following general themes: (1) Desire for sex or a high sex drive (e.g., *I like to develop fantasies based on porn, Because I reach orgasm faster*), (2) learning about sex and improving sexual performance (e.g., *To learn new sex-related things To have inspiration for sex*), and (3) regulating mood and emotions (e.g., *To improve my mood, Because of emotional issues*). After analyzing the reasons reported by women, we concluded that they could be organized on the same three general themes. Further, we combined the men’s and women’s reasons for pornography consumption. A total of 78 reasons that people considered important for watching pornography were selected (see Table 1).

### Study 2: Personality and Patterns of Pornography Consumption

In this study, we aimed to categorizing the reasons for watching pornography identified in Study 1 (78 reasons) into broader latent factors, with the aim to empirically test the identified

thematic content and to be able to test our predictions in a quantitative and inferential manner. Also, we wanted to investigate to what extent those reasons reflect a short-term mating orientation and a fitness increasing strategy. Therefore, we related the patterns in consuming pornography to sociosexuality, the Dark Triad traits, mate value, and life history strategies. As such, we derived the following hypotheses:

H1. Individuals that will score high on the reasons related to a high sex drive will be high on sociosexuality and the Dark Triad traits.

H2. Individuals that will score high on the reasons related to learning about sex and improving sexual performance will be high on mate value and slow life history strategies.

H3. Individuals that will score high on the reasons related to regulating mood and emotions will be low on the Dark Triad traits.

### Method

#### Participants and Procedure

The participants were 322 undergraduate students ( $M_{age} = 21.14$ ,  $SD = 3.79$ , 83.6% women). We informed all participants about the nature of the study and obtained their consent to participate. We administered the measures online using Google Forms. All participants were offered one extra credit point for their Research methods in psychology course. The average completion time was 20 minutes. The ethical approval for this study was obtained from the University of Bucharest.

#### Measures

Given the location of our sample and the first two authors, all the measures were translated into Romanian using a translation-back-translation procedure by two psychology researchers who are proficient in both Romanian and English. We tested the internal structure of each translated scale using Confirmatory Factor Analysis with Maximum Likelihood estimates. All loadings were  $>.40$  and all items loading on their corresponding factor. We obtained acceptable fit indices for all the models, except for the Dark Triad measure (Table 1), but this is to be expected based on previous failures to obtain the good fit for this measure using Confirmatory Factor Analysis (Atari & Chegeni, 2016).

*Reasons for watching pornography.* We used the identified reasons (Study 1) for watching pornography, consisting of 78 items, to measure reasons of pornography consumption. The participants were asked to rate the importance of each of the 78 reasons identified in Study 1 (1 = *not at all important*; 5 = *very important*). Demographic data were also collected.

Sociosexuality, used as an indicator of short-term mating orientation, was measured with the revised Sociosexual Orientation Inventory (Penke & Asendorpf, 2008), which consists of

**Table 1.** Results of the Principal Component Analysis on the 78 Reasons for Pornography Consumption.

Factor	Motive	Factor Loading
(1) <i>Sex drive</i>	For audio-video support during masturbation	.88
	To have visual content during masturbation	.87
	For masturbation	.84
	Because I like them	.80
	For physical pleasure	.78
	For a quick orgasm	.73
	For audio stimulation	.73
	To fulfill some fantasies	.71
	Because sexual thoughts come to my mind	.71
	For excitement	.70
	I can imagine that I am in certain scenarios that excite me more	.70
	For the pleasure of watching videos that include my kinks and fetishes	.69
	For the pleasure of seeing other people's bodies	.64
	For the feeling of release	.61
	For ecstasy	.61
	Out of habit	.60
	For release of accumulated sexual tension	.60
	To set the mood and the feeling of excitement	.59
	Because I like to develop fantasies based on porn	.58
	Because they are accessible	.55
	Because it has become a habit	.50
	Because it is an accessible content	.50
	Because I am bored	.49
	Because it is interesting	.49
	To improve mood	.48
	For the story and the script	.45
	Because it fascinates me	.45
	Because it caused addiction from the first views	.45
For discovering sexual orientation	.28	
(2) <i>Enhancing sexual performance</i>	To have a broader perspective on sex	.87
	Because I find out new information	.87
	To learn some techniques to apply in real life	.87
	To improve sexual performance	.86
	Because you learn new tricks	.86
	To gain experience	.83
	For self-education	.82
	Because I find out new things	.82
	To learn new sex positions	.79
	It is a source of inspiration	.77
	To try new things with my partner	.76
	Out of curiosity	.67
	For understanding the sexual pleasures of people of the opposite sex	.61
	It shows me what one partner wants from the other physically	.57
	Because it helps to know yourself better	.49
	To figure out what my sexual preferences are	.48
	To confront reality with sexual ideals and fantasies	.47
	To see something new	.41
	As a couple activity	.40
	Due to the lack of sex education in schools	.36
To compare myself to people of the same sex in the video in terms of physical appearance and attitude	.35	
(3) <i>Social and instrumental reasons</i>	Because of the entourage	.62
	Because all my friends are watching	.62
	For actors	.58
	For the quality of the actors	.55
	Commenting on scenes with friends	.51
	I paint nudes and it is my source of inspiration	.48
For entertainment	.46	

(continued)

Table 1. (continued)

Factor	Motive	Factor Loading
(4) <i>Lack of rel. and emotional skills</i>	Because them appear in the series I'm watching	.41
	Because of loneliness	.86
	Due to the absence of a romantic relationship	.81
	Because it's been a long time since I was sexually active	.77
	I am separated from my partner and I do not have the opportunity to have sex	.70
	Due to the need for love	.66
	Due to low sexual activity	.66
	Sometimes I feel this need when I am sad	.61
	Because I'm alone	.60
	To fill some emotional gaps	.60
	To alleviate emotional problems	.60
	Because I'm afraid to talk and convey my feelings	.58
	To feel that I am in a sexual relationship with a partner	.54
	Because I think that no potential partner may like me	.54
	Because I miss my ex-partner	.54
	To get my mind off some issues	.53
	To reduce the urge to have sex	.52
	It helps me drive away from my stressful thoughts	.52
	To calm me down	.51
	Because I fail to eliminate sexual tension, to reach an end, without them	.44
To excite me and see if I'm okay	.30	

nine items that measure three dimensions of sociosexual orientation: sociosexual behavior, sociosexual attitude, and sociosexual desire, rated on a 9-point Likert scale: Sociosexual behaviors (1 = 0; 9 = 20 or more), sociosexual attitudes (1 = *strongly disagree*; 9 = *strongly agree*); sociosexual desire (1 = *never*; 9 = *at least once a day*). We created an index for each dimension by averaging their corresponding items, which were then averaged to create a sociosexuality index (Cronbach's  $\alpha = .84$ ).

We assessed the Dark Triad traits with the Short Dark Triad (Jones & Paulhus, 2014), which consists of 27 items of Machiavellianism, narcissism, and psychopathy (nine items for each), rated on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). We averaged the items to obtain indexes for Machiavellianism ( $\alpha = .84$ ), narcissism ( $\alpha = .74$ ), and psychopathy ( $\alpha = .74$ ).

Mate value was measured with the six items from Graham-Kevan and Archer (2009) that target the following mate value attributes: attractiveness, personality, education, intelligence, career prospects, and social status. All the participants were asked to compare with their acquaintances, and rate themselves on each item (1 = *very low*; 5 = *very high*). We averaged the items to obtain an index of mate value ( $\alpha = .84$ ).

We assessed Life-history strategies with the High-K Strategy Scale (Giosan, 2006), which consists of 26 items (rated on a 5-point Likert scale; 1 = *strongly disagree*; 5 = *strongly agree*) that refer to aspects of the high-K independent criterion of fitness, such as resource access, upward mobility, health, attractiveness, mate value, social capital, and risk consideration. Items were averaged to obtain an index of life-history strategies ( $\alpha = .88$ ).

### Statistical Analysis

To group the reasons for pornography consumption in broad categories, we relied on a principal component analysis. We tested the sample adequacy with the Kaiser-Meyer-Olkin test (KMO). With respect to the number of factors to extract, we used two different approaches: (1) the "scree test" (Cattell, 1966) and (2) Horn's parallel analysis based on Monte Carlo simulation (Horn, 1965). Regarding the rotation of the factors, we relied on Direct Oblimin rotation. We chose an oblique rotation as we assumed that the reasons for watches pornography are conceptually inter-correlated. We used a Confirmatory factor analysis (CFA) to confirm the factor structure obtained via PCA. To test the fit of the models, we used the following indices, with Maximum Likelihood estimates: the Tucker-Lewis Index (TLI), comparative-fit index (CFI), and rootmean-square-error of approximation (RMSEA). Values greater than 0.90 for TLI, CFI, and lower than 0.06 for RMSEA indicate a good fit (Byrne, 2001).

## Results & Discussion

### Principal Component Analysis

We ran a principal component analysis to classify the 78 perceived reasons for pornography consumption in broad categories. The KMO test result was .95, which suggests an adequate sample for factor detection. With respect to the number of factors to extract, the "scree test" and Horn's parallel analysis suggested a four-factor solution. The results of the principal component analysis with Direct oblimin rotation can be seen in Table 1.

**Table 2.** Correlations Between the Dark Triad Traits, Sociosexuality, Mate Value, Life-History Strategies, and Reasons for Watching Pornography and Sex Differences on Reasons for Watching Pornography.

Variable	Increased Sex Drive	Enhancing Sexual Performance	Social and Instrumental Reasons	Lack of Relational and Emotional Skills
Machiavellianism	.22**	.28**	.12*	-.24**
Narcissism	.21**	.22**	.10	-.01
Psychopathy	.31**	.22**	.24**	-.25**
Sociosexuality	.53**	.25**	.20**	-.38**
Mate value	.02	.14*	.01	.03
High-K	-.06	.18*	-.03	.07
Overall M (SD)	2.37 (1.06)	2.22 (0.95)	1.51 (0.64)	1.82 (0.91)
Men M (SD)	3.09 (0.87)	2.23 (1.04)	1.82 (1.03)	2.32 (1.02)
Women M (SD)	2.23 (1.04)	2.21 (0.93)	1.45 (0.50)	1.73 (0.85)
t-test	6.32**	0.11	3.95*	3.95**
Hedges'g	0.84	0.02	0.59	0.67

\*  $p < .05$ , \*\*  $p < .01$ .

The first factor was named Increased sex drive, as the items that represent it refers to a high interest in sex (e.g., For the pleasure of watching videos that include my kinks and fetishes, Because sexual thoughts come to my mind). The first factor explained 39.19% of the total variance. The second factor was called Enhancing sexual performance because the items that represent it refer to the interest in exploring sexuality and learn more about sex (e.g., Because you learn new tricks, For understanding the sexual pleasures of people of the opposite sex). The second factor explained 8.30% of the total variance. The third factor was named Social and instrumental reasons as the items that represent it refers to group and entourage pressures and non-sexual reasons (e.g., Because all my friends are watching, Because they appear in the series I'm watching). The third factor explained 5.83% of the total variance. The fourth factor was called Lack of relational and emotional skills as the items that represent it refers to being lonely and using pornography for mood regulation (e.g., Due to the absence of a romantic relationship, It helps me drive away from my stressful thoughts). The fourth factor explained 3.83% of the total variance. All the extracted factors explained 57.17% of the total variance. One item was dropped as it had loadings  $<.30$  on all four factors (For discovering sexual orientation).

### Correlations of Reasons to Consume Pornography

Correlations between the dimensions of pornography use and personality are reported in Table 2. Individuals with high scores on the sex drive dimension (i.e., the first factor) of reasons to watch pornography were also characterized by high levels of Machiavellianism, narcissism, psychopathy, and sociosexuality. Individuals with high levels of enhancing sexual performance factor (i.e., the second dimension of reasons to watch pornography) also had high levels of Machiavellianism, narcissism, psychopathy, sociosexuality, mate value, and high-K independent criterion of fitness. People with high scores on the social and instrumental reasons factor (i.e., the third dimension) were also characterized by high levels of

Machiavellianism, psychopathy, and sociosexuality. Individuals with high levels of lack of relational and emotional skills factor (i.e., the fourth factor) had low levels of Machiavellianism, psychopathy, and sociosexuality. We can also see that men had higher scores than women on all the dimensions of reasons for pornography consumption, except for the second dimension (i.e., enhancing sexual performance).

We relied on a series of linear regressions (Table 3) to test the predictive power of the Dark Triad traits, sociosexuality, mate value, and high-K independent criterion of fitness on the reasons for pornography consumption. Collectively, the Dark Triad traits, sociosexuality, mate value, and high-K independent criterion of fitness predicted 27% of the variance of increased the sex drive dimension ( $R^2 = .27$ ;  $F[6, 316] = 19.54$ ,  $p < .01$ ); The residuals of narcissism ( $\beta = .16$ ,  $p < .05$ ) and sociosexuality ( $\beta = .42$ ,  $p < .01$ ) were associated with this dimension. Further, the Dark Triad traits, sociosexuality, mate value, and life history strategies predicted 14% of the variance of the enhancing sexual performance dimension ( $R^2 = .14$ ;  $F[6, 316] = 8.47$ ,  $p < .01$ ); The residuals of Machiavellianism ( $\beta = .23$ ,  $p < .01$ ), sociosexuality ( $\beta = .12$ ,  $p < .05$ ), and high-K independent criterion of fitness ( $\beta = .21$ ,  $p < .01$ ) were associated with this dimension. The Dark Triad traits, sociosexuality, mate value, and high-K independent criterion of fitness predicted 7% of the variance of the social and instrumental reasons dimension ( $R^2 = .07$ ;  $F[6, 316] = 3.67$ ,  $p < .01$ ); The residual of psychopathy ( $\beta = .27$ ,  $p < .01$ ) was associated with this dimension. Finally, the Dark Triad traits, sociosexuality, mate value, and high-K independent criterion of fitness predicted 10% of the variance of the lack of relational and emotional skills dimension ( $R^2 = .10$ ;  $F[6, 316] = 5.89$ ,  $p < .01$ ); The residuals of Machiavellianism ( $\beta = -.19$ ,  $p < .01$ ), and sociosexuality ( $\beta = -.13$ ,  $p < .05$ ) were associated with this dimension.

Further, we tested the mediating role of the Dark Triad traits in the relationship between sex and the reasons to consume pornography. After controlling for psychopathy, sex showed a weaker ( $b = -0.86$ ,  $p < .01$  without controlling for

**Table 3.** Multiple Regression Regarding the Predictive Power of the Dark Triad Traits, Sociosexuality, Mate Value, and Life-History Strategies on Reasons for Watching Pornography.

Independent variable	Increased Sex Drive		Enhancing Performance		Social Reasons		Lack of Rel. Skills	
	$\beta$	$R^2$	$\beta$	$R^2$	$\beta$	$R^2$	$\beta$	$R^2$
		.27**		.14**		.07**		.10**
Machiavellianism	.09		.23**		-.05		-.19**	
Narcissism	.16*		.06		.07		.12	
Psychopathy	.05		.05		.27**		-.12	
Sociosexuality	.42**		.12*		-.07		-.13*	
Mate value	-.04		-.07		-.05		-.02	
High-K	-.10		.21**		.01		.02	

\*  $p < .05$ , \*\*  $p < .01$ .

psychopathy,  $b = -0.72$ ,  $p < .01$  controlling for psychopathy) effect on increased sex drive dimension, the indirect effect being significant ( $b = -0.14$ ,  $p < .01$ ), suggesting partial mediation. After controlling for psychopathy, sex showed a weaker ( $b = 0.36$ ,  $p < .01$ , without controlling for psychopathy,  $b = 0.30$ ,  $p < .01$ , controlling for psychopathy) effect on social and instrumental reasons, the indirect effect being significant ( $b = -0.06$ ,  $p < .05$ ), suggesting partial mediation.

After controlling for psychopathy, sex showed a weaker ( $b = -0.59$ ,  $p < .01$ , without controlling for psychopathy,  $b = -0.49$ ,  $p < .01$ , controlling for psychopathy) effect on lack of relational and emotional skills, the indirect effect being significant ( $b = -0.10$ ,  $p < .01$ ), suggesting partial mediation. Psychopathy showed no mediation effect in the relationship between sex and enhancing sexual performance dimension. Also, Machiavellianism and Narcissism did not mediate the relationship between sex and reasons for consuming pornography.

### Study 3: Confirmatory Factor Analysis and Convergent Validity

In Study 3, we tested to what extent the factorial structure of the reasons for pornography consumption can be confirmed via Confirmatory factor analysis, and tested the convergent validity of the reasons to consume pornography. Considering that in Study 2 we showed that the reasons to watch pornography can be understood as a reflection of high sociosexuality, and that high sociosexuality is related to sexual fantasies (Baughman et al., 2014) and low sexual disgust (Burtaverde et al., 2021), we chose sexual fantasies and sexual disgust to test the convergent validity of the reasons to consume pornography.

## Method

### Participants and Procedure

In this study we relied on a sample of 327 undergraduate psychology students ( $M_{age} = 21.23$ ,  $SD = 3.49$ , 61.1% women). All the participants were informed about the nature of the research and consented to participate. We administered all the measures using Google Forms. All the participants received

one extra credit point for their Personality assessment course. The average completion time was 16 minutes.

## Measures

**Reasons for watching pornography.** We used the identified reasons for watching pornography, consisting of 78 items, to measure reasons of pornography consumption.

**Sexual fantasies** were measured with Wilson Sex Fantasy Questionnaire (Wilson, 1988), which consists of 40 items that assess how often (0 = Never; 5 = Regularly) people fantasize about various sexual behaviors. There are four dimensions of sexual fantasies: intimate (e.g., kissing passionately, oral sex), exploratory (e.g., sex with two other people), impersonal (e.g., sex with a stranger), and sadomasochistic (e.g., whipping or spanking someone). We averaged the items of each dimension to create indexes of intimate, exploratory, impersonal, and sadomasochistic fantasies. The index of the total score of sexual fantasies was obtained by averaging all the 40 items ( $\alpha = 0.93$ ). This can also be treated as an index of sex drive (Wilson, 1988).

We assessed sexual disgust with the Sexual Disgust Inventory (Crosby et al., 2020). This measure contains 31 items that measure eight dimensions of sexual disgust: taboo (e.g., sexual pleasure through use of human feces), incest (e.g., having sex with your sibling), unusual sex (e.g., vomiting during sex), oral sex (e.g., simultaneous oral sex), BDSM (e.g., inflicting pain on someone during sex) hygiene (e.g., having sex with someone who has unpleasant body odor), same-sex attraction (e.g., sex between two women/men) and promiscuity (e.g., threesomes or sex involving three people). Participants reported their level of disgust (1 = not at all sexually disgusting; 7 = extremely sexually disgusting) with each item. We averaged the items to create an index of sexual disgust ( $\alpha = 0.90$ ).

## Results & Discussion

### Confirmatory Factor Analysis—Developing the Reasons for Pornography Consumption Questionnaire (R-PORQ)

To verify the adequacy of the structure derived from the PCA, in Study 3 we ran a series of Confirmatory factor analyses. To



**Table 4.** Fit Indices Regarding the CFA of Reasons to Consume Pornography.

Model	$\chi^2$	df	CFI	TLI	RMSEA
78 items, four correlated factors	8104	2843	.64	.62	.09
54 items, four correlated factors	3544	1371	.73	.72	.08
41 items, four correlated factors	1902	773	.82	.80	.08
27 items, four correlated factors	663	318	.91	.90	.06

this end, we developed four models. The fit of the tested models can be seen in Table 4. The first model relied on the structure obtained after the PCA (four correlated factors, 78 items). The fit of this model was poor. This was somewhat expected as it is known that long measures fail to meet the criterion of local independence. The main reason for failing to meet the criterion of local independence is that some items have high residual covariances (Goldberg & Velicer, 2006). To enhance the model fit, we removed items with high residual covariances (Hopwood & Donnellan, 2010). The second model, consisting of 54 items, had a poor fit as well. The third model, with 41 items, had a better but still poor fit.

The last model (27 items) had an acceptable fit. In this model, we retained the most representative (with the highest standardized coefficients) items for each dimension. We chose to select relative few items for the final version of the measure as there are several advantages in the case of short measures, such as when the respondents have a limited attention span in online surveys (Konrath et al., 2014), are easier to administer in diary studies, or are useful when testing new theories or models (Konrath et al., 2018), as in the current case. Reasons for pornography consumption questionnaire can be found in Appendix A.

Individuals with higher scores on the first factor (i.e., increased sexual drive) also have higher scores on the second and third factors (i.e., enhancing sexual performance,  $r = .55$ ,  $p < .01$ , and social and instrumental reasons,  $r = .16$ ,  $p < .01$ ) and lower scores on the fourth factor (i.e., lack of relational and emotional skills,  $r = -.69$ ,  $p < .01$ ). Individuals with higher scores on the second factor (i.e., enhancing sexual performance) also have higher scores on the third factor (i.e., social and instrumental reasons,  $r = .32$ ,  $p < .01$ ) and lower scores on the fourth factor (i.e., lack of relational and emotional skills,  $r = -.51$ ,  $p < .01$ ). People with high scores on the third factor (i.e., social and instrumental reasons) had lower scores on the fourth factor (i.e., lack of relational and emotional skills,  $r = -.20$ ,  $p < .01$ ).

### Convergent Validity of the Reasons for Pornography Consumption Questionnaire (R-PORQ)

People with high scores on the increased sex drive dimension reported low scores on sexual disgust (Table 5;  $r = -.59$ ,  $p < .01$ ), and high scores on exploratory sexual fantasies ( $r = .55$ ,  $p < .01$ ), intimate fantasies ( $r = .37$ ,  $p < .01$ ), impersonal fantasies ( $r = .47$ ,  $p < .01$ ), sadomasochistic fantasies ( $r = .47$ ,

$p < .01$ ), and general sexual fantasies ( $r = .55$ ,  $p < .01$ ). Further, individuals high on the enhancing sexual performance dimension were low on sexual disgust ( $r = -.35$ ,  $p < .01$ ), and high on exploratory fantasies ( $r = .35$ ,  $p < .01$ ), intimate fantasies ( $r = .33$ ,  $p < .01$ ), impersonal fantasies ( $r = .28$ ,  $p < .01$ ), sadomasochistic fantasies ( $r = .31$ ,  $p < .01$ ), and general sexual fantasies ( $r = .33$ ,  $p < .01$ ). Individuals with high scores on the social and instrumental motives were high on impersonal sexual fantasies ( $r = .15$ ,  $p < .05$ ). People high on the lack of emotional and relational skills were also high on sexual disgust ( $r = .28$ ,  $p < .01$ ), and low on exploratory fantasies ( $r = -.24$ ,  $p < .01$ ), intimate fantasies ( $r = -.16$ ,  $p < .05$ ), impersonal fantasies ( $r = -.23$ ,  $p < .01$ ), sadomasochistic fantasies ( $r = -.23$ ,  $p < .01$ ), and general sexual fantasies ( $r = -.26$ ,  $p < .01$ ). Finally, individuals with high scores on the total score of reasons for watching pornography reported low sexual disgust ( $r = .48$ ,  $p < .01$ ), and high exploratory sexual fantasies ( $r = .45$ ,  $p < .01$ ), intimate fantasies ( $r = .32$ ,  $p < .01$ ), impersonal fantasies ( $r = .40$ ,  $p < .01$ ), sadomasochistic fantasies ( $r = .40$ ,  $p < .01$ ), and general sexual fantasies ( $r = .46$ ,  $p < .01$ ).

### General Discussion

In this study, we examined the self-reported reasons people consume pornography, as well as the personality correlates of those reasons. In Study 1, we identified 78 reasons for watching pornography that we clustered in four broad dimensions in Study 2: increased sex drive, enhancing sexual performance, social and instrumental reasons, and lack of relational and emotional skills. These dimensions were associated with individual differences in the Dark Triad traits, sociosexuality, mate value, and life history strategies. Apart from “enhancing sexual performance”, men endorsed the reasons for pornography consumption more strongly. Finally, psychopathy mediated the relationship between sex and several reasons to consume pornography. In Study 3, we confirmed the factorial structure of the reasons to watch pornography using Confirmatory factor analysis, obtaining a final version of the questionnaire, consisting of 27 items. Also, we inspected the convergent validity of the questionnaire, showing that the four dimensions are related to sexual disgust and sexual fantasies.

Regarding the identified reasons to watch pornography, our findings are partially aligned with other studies. Some of the most important reasons to consume pornography identified in other research include sexual exploration and learning about sexual health, coping, pleasure and enhancing offline sexuality (e.g., comfort when in a bad mood), emotional avoidance, and social reasons (Bolshinsky & Gelkopf, 2019; Franc et al., 2018; Hare et al., 2015; Reid et al., 2011). As we relied on a bottom-up approach (i.e., open-ended questions), while other studies used a top-down approach that relied on content specified *a priori*, the similarity of the findings suggests a high degree of universality of the reasons for pornography consumption.

We contend that researchers could benefit from an evolutionary framework to better understand why people consume

**Table 5.** Bivariate Pearson Correlations Between the Dimensions of Reasons for Watching Pornography, Sexual Disgust, and Sexual Fantasies.

Variable	Sexual Disgust	Exploratory Fantasies	Intimate Fantasies	Impersonal Fantasies	Sadomasochistic Fantasies	Total Sex Fantasies
Increased sex drive	-.59**	.55**	.37**	.47**	.47**	.55**
Enhancing sexual performance	-.35**	.35**	.33**	.28**	.31**	.38**
Social and instrumental motives	.10	.10	-.01	.15*	.09	.09
Lack of em. and rela. skills	.28**	-.24**	-.16*	-.23**	-.23**	-.26**
Reasons total	.48**	.45**	.32**	.40**	.40**	.46**

\*  $p < .05$ , \*\*  $p < .01$ .

pornography. As such, we considered that the identified reasons could be understood as a reflection of a short-term mating orientation (e.g., high sociosexuality) and a fitness increasing strategy to enhance the probability of attracting a mate, and, implicitly, the probability of reproducing. We can see that the first identified dimension of pornography consumption reasons (i.e., sex drive) was composed of items such as “because sexual thoughts come to my mind”, and “for the pleasure of seeing other people’s bodies”. Individuals with high scores on this dimension had high levels of the Dark Triad traits and were more interested in casual sex (i.e., high sociosexuality) sociosexuality. Therefore, considering the content of this dimension and its correlates, we can assume that it reflects a short-term mating orientation. Individuals characterized by short-term mating may choose to engage in watching pornography to satisfy their increased sex drive, in contexts and situations when they cannot engage in casual sex. As such, the increased sex drive dimension of reasons for watching pornography should not be understood as an adaptation, but as a by-product that clusters around adaptations such as short-term mating orientation.

The second dimension of the reasons for watching pornography was enhancing sexual performance. We argued that, besides a reflection of a short-term mating orientation, reasons to watch pornography might be understood as a tactic that enhances the probability of attracting a mate, and, implicitly, the probability of reproducing. This second dimension was represented by items such as “to learn new sex positions” and “to understand the sexual pleasures of people of the opposite sex, being called “enhancing sexual performance.” Individuals high on this dimension had higher scores on the Dark Triad traits and sociosexuality, but, more interestingly, on mate value and slow life history strategy. Therefore, we can argue that people who perceive themselves as having high mate value and who are characterized by a slow life history strategy (i.e., high- $K$ )—which is characterized by preferences for long-term mating—try to perfect their sexual skills through gathering new knowledge from pornographic movies. Doing so may enable them to better signal their “value” to their partners during sexual intercourse, meaning that they pay attention to the first impression they make on new mates, as the first

impression is important in human relationships (Harris & Garris, 2008).

The third dimension of the reasons for pornography consumption was represented by items like “because all my friends are watching”, and “I paint nudes, and it is my source of inspiration”; we called this dimension “social and instrumental reasons”. Individuals with high scores on this dimension also had high levels of Machiavellianism, psychopathy, and sociosexuality. It seems that this category of reasons for watching pornography reflects reasons that refer to watching pornography mainly because of seeking the acceptance of social groups, such as friends. This may be explained by the fact that watching pornography is a common habit (Hald, 2006). It is well known that young people (such as those from our samples) place great importance in their reputation and social acceptance more than older people (Marshall, 2001) and watching pornography may facilitate social approval among peers, especially college-aged ones.

The fourth factor of the reasons for pornography consumption (i.e., lack of relational and emotional skills) was composed of items like “due to the absence of a romantic relationship” and “it helps me drive away from my stressful thoughts”. People high on this dimension had lower scores on Machiavellianism, psychopathy, and sociosexuality. The reasons encompassed by this factor suggest that individuals who score high on them watch pornography to regulate their mood and deal with negative emotions. This is congruent with other findings that showed that one of the reasons for pornography consumption is mood regulation (e.g., comforting when in a bad mood; Franc et al., 2018). It seems that people use pornography to alleviate negative emotions, which may be explained by the fact that pornography consumption induces psychological moods and emotions (e.g., pleasure, satisfaction) as those elicited during casual sex and sexual intercourse (Hald & Malamuth, 2008).

We found that men had higher scores on the dimensions of reasons for pornography consumption, except for the of enhancing sexual performance. That was to be expected, as men usually have a higher sex drive and more sexual fantasies than women (Baughman et al., 2014), being more oriented to short-term mating (Jonason et al., 2009). The fact that there were no

sex differences on the dimension enhancing sexual performance is congruent with the idea that both men and women struggle with skills for mate retention (Apostolou, 2007). In traditional societies, parents used to choose the partners for their children (Apostolou et al., 2018). Therefore, both men and women engage in strategies to increase their fitness to attract mates and enhancing their sexual knowledge and performance, is one of them.

Psychopathy mediated the relationship between sex and the reasons to consume pornography (excepting the dimension of enhancing sexual performance, as there were no sex differences). This may be because men are more interested in casual sex than women (Jonason et al., 2009), have a wider array of sexual fantasies (Baughman et al., 2014), and men high on psychopathy have frequent sexual fantasies (Baughman et al., 2014), and may use pornography to satisfy this need. Therefore, psychopathy represents an explicative mechanism of the indirect relationship between sex and the reasons to consume pornography.

The findings of this research materialized on a psychometric measure that should be useful in assessing the reasons for pornography consumption in both research and practice settings, showing very good psychometric properties. The measure was developed using both qualitative and quantitative approach which should maximize the probability of tapping the most important reasons for pornography consumption, enhancing the internal validity of future research.

### Limitations and Conclusions

Even though this research is, to our knowledge, the first to propose an evolutionary perspective on the reasons for watching pornography, it has some important limitations. First, our samples consisted mostly of young individuals, who are, in general, more interested, but less experienced in sex than older people (Buckingham & Bragg, 2004). Second, our samples consisted mostly of women. Because research has consistently shown that men seem to be more interested in sex than women (e.g., Jonason et al., 2009), further studies should use more balanced samples in terms of sex ratio when examining these factors. Third, we relied on non-probabilistic convenience samples and our findings are sample-dependent (e.g., WE.I.R.D. participants; Henrich et al., 2010) which may affect the generalizability of the research. Although many studies in psychology use convenience student samples, future studies should include more heterogeneous participants to increase the generalizability of the findings.

Despite these limitations, we showed that the reasons for pornography consumption are varied and can be understood from an evolutionary perspective. They represent reflections of a short-term mating orientation and fitness-increasing strategies—tactics that enhance the probability of maintaining a mate. We also proposed a psychometric measure for researchers and practitioners interested in pornography consumption reasons.

## Appendix A

**Table A1.** Reasons for Pornography Consumption Questionnaire (R-PORQ).

1. Because I like them
2. Because I find out new information
3. Because they appear in the series I'm watching
4. Because it's been a long time since I was sexually active
5. To fulfill some fantasies
6. To learn some techniques to apply in real life
7. Because of the entourage
8. To fill some emotional gaps
9. Because sexual thoughts come to my mind
10. To improve sexual performance
11. I paint nudes and it is my source of inspiration
12. To feel that I am in a sexual relationship with a partner
13. I can imagine that I am in certain scenarios that excite me more
14. Because you learn new tricks
15. Commenting on scenes with friends
16. It helps me drive away from my stressful thoughts
17. For the pleasure of watching videos that include my kinks and fetishes
18. To gain experience
19. Because all my friends are watching
20. To calm me down
21. For the pleasure of seeing other people's bodies
22. For self-education
23. To excite me and see if I'm okay
24. For ecstasy
25. To learn new sex positions
26. For release of accumulated sexual tension
27. It shows me what one partner wants from the other physically

#### Coding key

Increased sex drive: 1,5,9,13,17,21,24,26

Enhancing sexual performance: 2,6,10,14,18,22,25,27

Social and instrumental motives: 3,7,11,15,19

Lack of relational and emotional skills: 4,8,12,16,20,23

## Appendix B

**Table B1.** Identified Pornography Consumption Reasons by Sex.

#### Men's reasons for watching pornography

1. To get aroused
2. Because I am bored
3. Because I am alone
4. To satisfy my curiosity
5. Because I like them
6. To have visual material during masturbation
7. To learn new sex-related things
8. To enhance sexual appetite
9. To pleasure myself and masturbate
10. It makes me feel good physically and mentally
11. I want to relax after a long day
12. I feel the need to free myself
13. To improve my mood.
14. Because I'm not in a relationship
15. Because of emotional issues

(continued)

**Table B1.** (continued)

- 
16. Because I find it interesting
  17. Out of habit
  18. Because I think no one may like me.
  19. I like to develop fantasies based on porn
  20. Because of the lack of activity
  21. Because of commodity
  22. For sexual education
  23. For entertainment
  24. For educational purposes
  25. To have inspiration for sex
  26. To explore my sexuality
  27. My partner is not always available
  28. Because of the pleasure in seeing other people's bodies
  29. Because they are accessible
  30. To discover my sexual orientation
  31. As a substitute for sex
  32. It's more convenient than imagining something when you masturbate
  33. To learn new sexual techniques
  34. Because I am afraid to tell and express my feelings
  35. To calm down
  36. Because of the story
  37. Sometimes I feel this need when I am sad
  38. It's much easier and more fun to masturbate like that
  39. To understand the sexuality of others
  40. To reach the sensation of emptiness and satisfaction.
  41. Because I have fetishes that you can't easily implement
  42. Because I reach orgasm faster
- 

Women's reasons for watching pornography

---

1. To satisfy my curiosity
  2. To have a broader perspective on sex
  3. Because they are accessible
  4. Because I learn new things about sex
  5. For inspiration
  6. Because I am bored
  7. For a quick orgasm
  8. For self-education
  9. To take my mind off of other things
  10. To pleasure myself and masturbate
  11. Because of reduced sexual activity
  12. To release of tension accumulated
  13. To learn some techniques to apply in real life
  14. I am separated from my partner and I do not have the opportunity to have sex
  15. To set the mood and the feeling of excitement
  16. To relax myself
  17. Because of the desire to discover my own pleasures
  18. Because of the need for love
  19. To enhance sexual performance
  20. Because, when I masturbate, I feel the need to transpose myself into a video like this
  21. To feel that I am in a sexual relationship with a partner.
  22. Because I miss my ex-partner.
  23. Because sexual thoughts come to my mind
  24. To get aroused
  25. To learn new sex positions
  26. Because of sexual desire
  27. For entertainment
- 

(continued)

**Table B1.** (continued)

- 
28. For emotional release
  29. To diminish the desire to have sex
  30. Because it causes addiction from the first views
  31. For the story
  32. To observe the techniques used
  33. Because they appear in the series I watch
  34. As a couple activity
  35. Feel horny and do not have the opportunity to find a partner immediately
  36. For audio stimulation
  37. For couple dynamics
  38. For mental relaxation
  39. To compare myself with people of the same sex in the video in terms of physical appearance and attitude
  40. To explore my sexual orientation
  41. Because I am alone
  42. To understand the sexual pleasures of people of the opposite sex
  43. To release of tension
  44. It helps me drive away my stressful thoughts
  45. To confront reality with sexual ideals
  46. Because sexual intercourse improves.
  47. To fill some emotional gaps
  48. Because of the entourage
  49. To excite me and see if I'm okay
  50. Commenting on scenes with friends
  51. Because it's been a long time since I was sexually active
  52. For the visual representation of intimate fantasies
  53. For the pleasure of watching videos that include my kinks and fetishes
  54. For the quality of the actors
  55. Due to the lack of sex education in schools
  56. I paint nudes and it is my source of inspiration
  57. Makes you feel good about your own desires
  58. My partner suggested to watch them
  59. Because all my friends are watching
  60. Because I fail to eliminate sexual tension, to reach an end, without them
  61. Because it fascinates me
- 

### Authors' Note

The second author was partially funded by the Polish National Agency for Academic Exchange (PPN/U LM/2019/1/00019/U/00001).


### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article: narodowa agencja wymiany akademickiej (PPN/U LM/2019/1/00019/U/00001)

### ORCID iD

Vlad Burtăverde  <https://orcid.org/0000-0002-7028-4366>

## References

- Alexa.com. (2020). *The top 500 sites on the Web*. <http://www.alexa.com/topsites>
- Apostolou, M. (2007). Sexual selection under parental choice: The role of parents in the evolution of human mating. *Evolution and Human Behavior*, 28, 403–409. <https://doi.org/10.1016/j.evolhumbehav.2007.05.007>
- Apostolou, M., Shialos, M., Kyrou, E., Demetriou, A., & Papamichael, A. (2018). The challenge of starting and keeping a relationship: Prevalence rates and predictors of poor mating performance. *Personality and Individual Differences*, 122, 19–28. <https://doi.org/10.1016/j.paid.2017.10.004>
- Atari, M., & Chegeni, R. (2016). Assessment of dark personalities in Iran: Psychometric evaluation of the Farsi translation of the Short Dark Triad (SD3-F). *Personality and Individual Differences*, 102, 111–117. <https://doi.org/10.1016/j.paid.2016.06.070>
- Baughman, H. M., Jonason, P. K., Veselka, L., & Vernon, P. A. (2014). Four shades of sexual fantasies linked to the Dark Triad. *Personality and Individual Differences*, 67, 47–51. <https://doi.org/10.1016/j.paid.2014.01.034>
- Belsky, J., Houts, R. M., & Fearon, R. P. (2010). Infant attachment security and the timing of puberty: Testing an evolutionary hypothesis. *Psychological Science*, 21(9), 1195–1201. <https://doi.org/10.1177/0956797610379867>
- Bergner, R. M., & Bridges, A. J. (2002). The significance of heavy pornography involvement for romantic partners: Research and clinical implications. *Journal of Sex and Marital Therapy*, 28, 193–206. <https://doi.org/10.1080/009262302760328235>
- Bolshinsky, V., & Gelkopf, M. (2019). Reasons and risk factors of problematic engagement in online sexual activities. *Sexual Addiction & Compulsivity*, 26, 262–292. <https://doi.org/10.1080/10720162.2019.1645062>
- Bragg, S., & Buckingham, D. (2004). Embarrassment, education, and erotics: The sexual politics of family viewing. *European Journal of Cultural Studies*, 7, 441–459. <https://doi.org/10.1177/1367549404047145>
- Burtăverde, V., Jonason, P. K., Ene, C., & Istrate, M. (2021). On being “dark” and promiscuous: The Dark Triad traits, mate value, disgust, and sociosexuality. *Personality and Individual Differences*, 168, 110255. <https://doi.org/10.1016/j.paid.2020.110255>
- Buss, D. M. (1995). Psychological sex differences: Origins through sexual selection. *American Psychologist*, 50, 164–168. <https://doi.org/10.1037/0003-066X.50.3.164>
- Buss, D. M. (2008). Human nature and individual differences: Evolution of human personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 29–60). The Guilford Press.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1, 55–86. [https://doi.org/10.1207/S15327574IJT0101\\_4](https://doi.org/10.1207/S15327574IJT0101_4)
- Carter, G. L., Lyons, M., & Brewer, G. (2018). Lifetime offspring and the Dark Triad. *Personality and Individual Differences*, 132, 79–83. <https://doi.org/10.1016/j.paid.2018.05.017>
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245–276. [https://doi.org/10.1207/s15327906mbr0102\\_10](https://doi.org/10.1207/s15327906mbr0102_10)
- Clancy, E. M., Klettke, B., & Hallford, D. J. (2019). The dark side of sexting—Factors predicting the dissemination of sexts. *Computers in Human Behavior*, 92, 266–272. <https://doi.org/10.1016/j.chb.2018.11.023>
- Crosby, C. L., Durkee, P. K., Meston, C. M., & Buss, D. M. (2020). Six dimensions of sexual disgust. *Personality and Individual Differences*, 156, 109714. <https://doi.org/10.1016/j.paid.2019.109714>
- Dines, G. (2010). *Pornland: How porn has hijacked our sexuality*. Beacon Press.
- Egan, V., & Parmar, R. (2013). Dirty habits? Online pornography use, personality, obsessionality, and compulsivity. *Journal of Sex & Marital Therapy*, 39, 394–409. <https://doi.org/10.1080/0092623X.2012.710182>
- Figueredo, A. J., Vásquez, G., Brumbach, B. H., Schneider, S. M., Sefcek, J. A., Tal, I. R., Hill, D., Wenner, C. J., & Jacobs, W. J. (2006). Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review*, 26, 243–275. <https://doi.org/10.1016/j.dr.2006.02.002>
- Franc, E., Khazaal, Y., Jasiowka, K., Lepers, T., Bianchi-Demicheli, F., & Rothen, S. (2018). Factor structure of the Cybersex Reasons Questionnaire. *Journal of Behavioral Addictions*, 7, 601–609. <https://doi.org/10.1556/2006.7.2018.67>
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, 23, 573–587. <https://doi.org/10.1017/S0140525X0000337X>
- Giosan, C. (2006). High-K strategy scale: A measure of the high-K independent criterion of fitness. *Evolutionary Psychology*, 4, 394–405. <https://doi.org/10.1177/147470490600400131>
- Giosan, C., Mureșan, V., Wyka, K., Mogoșe, C., Cobeau, O., & Szentagotai, A. (2018). The evolutionary fitness scale: A measure of the independent criterion of fitness. *EvoS Journal: The Journal of the Evolutionary Studies Consortium*, 7, 181–205.
- Goldberg, L. R., & Velicer, W. F. (2006). Principles of exploratory factor analysis. In S. Strack (Ed.), *Differentiating normal and abnormal personality* (2nd ed., pp. 209–237). Springer.
- Graham-Kevan, N., & Archer, J. (2009). Control tactics and partner violence in heterosexual relationships. *Evolution and Human Behavior*, 30, 445–452. <https://doi.org/10.1016/j.evolhumbehav.2009.06.007>
- Greiling, H., & Buss, D. M. (2000). Women’s sexual strategies: The hidden dimension of extra-pair mating. *Personality and Individual Differences*, 28, 929–963. [https://doi.org/10.1016/S0191-8869\(99\)00151-8](https://doi.org/10.1016/S0191-8869(99)00151-8)
- Griskevicius, V., Ackerman, J. M., Cantú, S. M., Delton, A. W., Robertson, T. E., Simpson, J. A., Thompson, M. E., & Tybur, J. M. (2013). When the economy falters, do people spend or save? Responses to resource scarcity depend on childhood environments. *Psychological Science*, 24(2), 197–205. <https://doi.org/10.1177/0956797612451471>

- Hald, G. M. (2006). Gender differences in pornography consumption among young heterosexual Danish adults. *Archives of Sexual Behavior, 35*, 577–585. <https://doi.org/10.1007/s10508-006-9064-0>
- Hald, G. M., & Malamuth, N. M. (2008). Self-perceived effects of pornography consumption. *Archives of Sexual Behavior, 37*, 614–625. <https://doi.org/10.1007/s10508-007-9212-1>
- Hare, K. A., Gahagan, J., Jackson, L., & Steenbeek, A. (2015). Revisualising ‘porn’: How young adults’ consumption of sexually explicit Internet movies can inform approaches to Canadian sexual health promotion. *Culture, Health, & Sexuality, 17*, 269–283. <https://doi.org/10.1080/13691058.2014.919409>
- Harris, M. J., & Garris, C. P. (2008). You never get a second chance to make a first impression: Behavioral consequences of first impressions. In N. Ambady & J. J. Skowronski (Eds.), *First impressions* (pp. 147–168). Guilford Publications.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not W.E.I.R.D. *Nature, 466*, 29. <https://doi.org/10.1038/466029a>
- Hopwood, C. J., & Donnellan, M. B. (2010). How should the internal structure of personality inventories be evaluated? *Personality and Social Psychology Review, 14*, 332–346. <https://doi.org/10.1177/1088868310361240>
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30*, 179–185. <https://doi.org/10.1007/BF02289447>
- Jonason, P. K., & Buss, D. M. (2012). Avoiding entangling commitments: Tactics for implementing a short-term mating strategy. *Personality and Individual Differences, 52*(5), 606–610. <https://doi.org/10.1016/j.paid.2011.12.0>
- Jonason, P. K., Foster, J., Oshio, A., Sitnikova, M., Birkas, B., & Gouveia, V. (2017). Self-construals and the Dark Triad traits in six countries. *Personality and Individual Differences, 113*, 120–124. <https://doi.org/10.1016/j.paid.2017.02.053>
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2009). The dark triad: Facilitating a short-term mating strategy in men. *European Journal of Personality, 23*, 5–18. <https://doi.org/10.1002/per.698>
- Jonason, P. K., Luevano, V. X., & Adams, H. M. (2012). How the Dark Triad traits predict relationship choices. *Personality and Individual Differences, 53*, 180–184. <https://doi.org/10.1016/j.paid.2012.03.007>
- Jonason, P. K., & Sherman, R. A. (2020). Personality and the perception of situations: The Big Five and Dark Triad traits. *Personality and Individual Differences, 163*, 110081. <https://doi.org/10.1016/j.paid.2020.110081>
- Jonason, P. K., Valentine, K. A., Li, N. P., & Harbeson, C. L. (2011). Mate-selection and the Dark Triad: Facilitating a short-term mating strategy and creating a volatile environment. *Personality and Individual Differences, 51*, 759–763. <https://doi.org/10.1016/j.paid.2011.06.025>
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*, 28–41. <https://doi.org/10.1177/1073191113514105>
- Jones, D. N., & Weiser, D. A. (2014). Differential infidelity patterns among the Dark Triad. *Personality and Individual Differences, 57*, 20–24. <https://doi.org/10.1016/j.paid.2013.09.007>
- Kasper, T. E., Short, M. B., & Milam, A. C. (2015). Narcissism and Internet pornography use. *Journal of Sex & Marital Therapy, 41*, 481–486. <https://doi.org/10.1080/0092623X.2014.931313>
- Konrath, S., Meier, B. P., & Bushman, B. J. (2014). Development and validation of the single item narcissism scale (SINS). *PLOS One, 9*(8), e103469. <https://doi.org/10.1371/journal.pone.0103469>
- Konrath, S., Meier, B. P., & Bushman, B. J. (2018). Development and validation of the single item trait empathy scale (SITES). *Journal of Research in Personality, 73*, 111–122. <https://doi.org/10.1016/j.jrp.2017.11.009>
- Lee, K., & Ashton, M. C. (2014). The Dark Triad, the Big Five, and the HEXACO model. *Personality and Individual Differences, 67*, 2–5. <https://doi.org/10.1016/j.paid.2014.01.048>
- Liamputtong, P. (2009). *Qualitative research methods* (3rd ed.). Oxford University Press.
- Lyons, M., Khan, S., Sandman, N., & Valli, K. (2019). Dark dreams are made of this: Aggressive and sexual dream content and the Dark Triad of Personality. *Imagination, Cognition and Personality, 39*, 88–96. <https://doi.org/10.1177/0276236618803316>
- Malamuth, N. M. (1996). Sexually explicit media, gender differences and evolutionary theory. *Journal of Communication, 46*, 8–31.
- Marshall, S. K. (2001). Do I matter?: Construct validation of adolescents’ perceived mattering to parents and friends. *Journal of Adolescence, 24*, 473–490. <https://doi.org/10.1006/jado.2001.0384>
- Muthukrishna, M., & Henrich, J. (2019). A problem in theory. *Nature Human Behaviour, 3*, 221–229. <https://doi.org/10.1038/s41562-018-0522-1>
- Paul, B. (2009). Predicting Internet pornography use and arousal: The role of individual difference variables. *The Journal of Sex Research, 46*, 344–357. <https://doi.org/10.1080/00224490902754152>
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556–563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- 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*, 1113–1135. <https://doi.org/10.1037/0022-3514.95.5.1113>
- Reid, R. C., Li, D. S., Gilliland, R., Stein, J. A., & Fong, T. (2011). Reliability, validity, and psychometric development of the Pornography Consumption Inventory in a sample of hypersexual men. *Journal of Sex & Marital Therapy, 37*, 359–385. <https://doi.org/10.1080/0092623X.2011.607047>
- Salmon, C. (2012). The pop culture of sex: An evolutionary window on the worlds of pornography and romance. *Review of General Psychology, 16*, 152–160. <https://doi.org/10.1037/a0027910>
- Salmon, C., & Fisher, M. L. (2018). Putting the “sex” into “sexuality”: Understanding online pornography using an evolutionary framework. *EvoS Journal: The Journal of the Evolutionary Studies Consortium, 9*, 1–15.
- Salmon, C., Fisher, M. L., & Burch, R. L. (2019). Evolutionary approaches: Integrating pornography preferences, short-term mating, and infidelity. *Personality and Individual Differences, 148*, 45–49. <https://doi.org/10.1016/j.paid.2019.05.030>

- Salmon, C., & Symons, D. (2003). *Warrior lovers: Erotic fiction, evolution and female sexuality*. Yale University Press.
- Schmitt, D. P. (2016). Fundamentals of human mating strategies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology—foundations* (pp. 294–317). Wiley.
- Schmitt, D. P., Shackelford, T. K., & Buss, D. M. (2001). Are men really more ‘oriented’ toward short-term mating than women? A critical review of theory and research. *Psychology, Evolution, & Gender*, 3, 211–239. <https://doi.org/10.1080/14616660110119331>
- Timmermans, E., De Caluwé, E., & Alexopoulos, C. (2018). Why are you cheating on Tinder?: Exploring users’ motives and (dark) personality traits. *Computers in Human Behavior*, 89, 129–139. <https://doi.org/10.1016/j.chb.2018.07.040>
- Twohig, M. P., & Crosby, J. M. (2010). Acceptance and commitment therapy as a treatment for problematic internet pornography viewing. *Behavior Therapy*, 41, 285–295. <https://doi.org/10.1016/j.beth.2009.06.002>
- Wilson, G. D. (1988). Measurement of sex fantasy. *Sexual and Marital Therapy*, 3(1), 45–55. <https://doi.org/10.1080/02674658808407692>
- Wright, P. J., & Randall, A. K. (2012). Internet pornography exposure and risky sexual behavior among adult males in the United States. *Computers in Human Behavior*, 28, 1410–1416. <https://doi.org/10.1016/j.chb.2012.03.003>