



Personality and Sexual Perceptions of Penises: Digital Impression Formation

Thomas R. Brooks¹ · Stephen Reysen²

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Abstract

Dating app users are likely to experience a high frequency of viewing the sexually explicit material of potential partners prior to a physical meeting. The present study aimed to investigate what information is inferred from a picture of a penis at zero-acquaintance. Past research in impression formation at zero-acquaintance has demonstrated a stability with regard to personality and trait perceptions of faces. Utilizing 106 participants, our study extends this paradigm by testing the hypothesis that penis prototypicality would be associated with attractiveness, as well as explore the personality and sexual perceptions of penises along the dimensions of girth, length, and amount of pubic hair. The hypotheses were confirmed and the analysis of penis dimensions revealed strong results. Penises which were wider, longer, and moderately hairy were perceived more positively in terms of personality and sexual appeal. Shorter and narrower penises were perceived as more neurotic. The results demonstrate the function of impression formation within the digital sexual landscape with regard to sexually explicit material.

Keywords Zero acquaintance · Penis · Perception · Digital · Sexting

Introduction

Since the beginning of the COVID-19 pandemic, scholarship regarding the sexual, romantic, and dating behaviors of people has increased dramatically to continuously document the ever-shifting socio-political landscape (Yasir Arafat et al., 2022). Globally, partnered, sexual behavior declined significantly over the course of lock-downs and pandemic restrictions (Bowling et al., 2021; Cito et al., 2021; Firkey et al., 2021; Gleason et al., 2021; Lehmiller et al., 2021). However, while

✉ Thomas R. Brooks
trbrooks@nmhu.edu

¹ Department of Psychology, New Mexico Highlands University, Las Vegas, NM 87701, USA

² Texas A&M University-Commerce, Commerce, USA

there were decreases in partnered sexual behavior, there were interesting increases in other areas of sexuality: sexual satisfaction (Delcea et al., 2021; Mumm et al., 2021), especially for those who incorporated new sexual positions and shared sexual fantasies (Lehmiller et al., 2021), fantasizing, masturbation, and online pornography use (Casalheira et al., 2021; Delcea et al., 2021), as well as digital sexual behaviors (Eleuteri & Terzitta, 2021; Lehmiller et al., 2021). Digital sexual behavior (often referred to as cybersex) involves varied behaviors within post-analog spaces (e.g., machine-mediated socialization; Alač, 2015), including but not limited to: chat/cam participation, sexting, pornography consumption, virtual reality sexual behavior, and interacting with artificial intelligence (AI) agents (Banerjee & Sathyanarayana, 2021). Due to this increase in digital sexual behavior, the present study aimed to understand what assumptions about potential romantic or sexual partners are made from receiving sexually explicit content.

Digitized Sexuality

While digital sexual behaviors have been prominent in health, safety, and educational discourses since the conception of the world wide web (Courtice & Shaughnessy, 2017), with the emphasis of physical separation during the pandemic, the research has taken on a new vigor. Nessaibia et al. (2021) postulated that digital sexual behavior may become more salient in terms of what “counts” as sexual behavior. As definitions of what constitutes sexual behavior becomes more ambiguous, the authors highlight the growing concerns of digital infidelity. Past research of sexting behaviors have primarily focused on the negative outcomes associated with them, as concerns about privacy and exploitation abound in digital spaces (Fisico, 2021; Maes & Vandenbosch, 2022; Thomas et al., 2021). Additionally, Lehmiller et al. (2021) argued that while they observed digital sexuality behaviors increased, it was not associated with overall well-being or satisfaction during COVID-19 lockdowns.

Despite the research interest of digital sexual behaviors in the wake of COVID-19, the frequency in which people engaged in digital sexual behavior is not clear, particularly with regard to who is engaging in the digital sexual behavior and why. In line with the observations by Lehmiller et al. (2021), reports of sexting behaviors during COVID-19 has been mixed at best. Gasso et al. (2021) observed that there was an overall decrease in both sexting behaviors, as well as online sexual victimization during COVID-19 lockdowns. However, Maes and Vandenbosch (2022) reported 40.9% of adolescents sexted during lockdowns. Further, pandemic-related stress predicted emotionally driven or risky sexting behaviors in adults (Bianchi et al., 2021). Lastly, Vendemia and Coduto (2022) reported that sexting and explicit media sending was mostly used by casual online daters, rather than romantic daters. For the present study, it is these casual or unacquainted daters’ perceptions of the explicit media that is of most interest.

Digital Impression Formation

Within the context of dating apps (e.g., Tindr, Grindr, Plenty of Fish, Bumble), individuals must make choices about which strangers they would like to engage in conversation with based on limited information: profile picture(s) and a short biography (Anzani et al., 2018). Often times these choices are made primarily on perceived attractiveness (especially for men; Dai & Robbins, 2021; Ramaker, 2020), or other in-group related factors (e.g., race, education; Ranzini et al., 2022). Digital dating requires fast and loose heuristics and impression formation to narrow the pool of potential romantic or sexual partners. Due to this lack of information, app users will often engage in “imagined interactions,” whereby they create fictitious scenarios and daydreams about possible interactions with potential partners prior to meeting them in-person (Carpenter, 2022). Thus, it is important to understand the relationship between the information available, and what kinds of impressions are being formed by said material.

Reading the Face

Because digital impression formation relies on very little information disclosed by potential romantic partners, visual information takes primacy (Dai & Robbins, 2021; Ramaker, 2020). Zero-acquaintance personality assessment involves the extent to which accurate assessments of personality can be made about a person from only the face or digital representation (Albright et al., 1988, 1997). Previous research has demonstrated that self-reported personality assessment and a personality assessment made by someone close to the person both provided reasonable predictability to subsequent behavior, despite not always demonstrating agreement between the person and the close other (McCrae & Mottus, 2019). However, when acquaintances or strangers rate a person on personality variables, they tend to share quite a bit of agreement between raters (Funder & Colvin, 1988; Walker & Vetter, 2016), despite mixed findings regarding whether the person’s self-rating and the stranger’s rating correspond (Alper et al., 2021; Berry, 1990; Levesque & Kenny, 1993; Watson, 1989). Thus, zero-acquaintance ratings of personality may not be necessarily the most ideal method to measure someone’s “true” personality (McCrae & Mottus, 2019, p. 415). Yet, this method can provide important information about how the appearance of a person creates a socially shared subjective (or implicit) theory of said person (Walker & Vetter, 2016).

Implicit theories of personality have been investigated at the intersection of social and personality psychology for decades (Schneider, 1973). Implicit theories of personality are dynamic inferences made by observers toward the observed person and occur at the intersection of social-cognitive processes within sociocultural contexts (Uleman & Saribay, 2012). On the individual level, personality inferences can include the face, but may also include other dimensions of physical appearance including but not limited to physical build, clothing choices, hair style, and primary and secondary sex characteristics. Additionally, factors related to the cultural

context of the person being perceived or perceiving play an important role regarding how the perceiver formulates their theory about the perceived person.

The ability to infer character traits based on an individual's facial appearance presents an adaptive function. Alper and colleagues (2021) found that the traits within the dark triad (e.g., subclinical narcissism, Machiavellianism, and psychopathy) and some of the big five (openness, conscientiousness, extraversion, agreeableness, and neuroticism) can be accurately inferred from a face by a stranger. Further, Hirst et al. (2017) demonstrated that cannabis use, as well as cognitive abilities can also be inferred on a stranger's face. Thus, for digital daters, utilizing facial information in profile pictures may provide a wealth of information for making inferences beyond whether the target is deemed attractive.

Unsolicited Dick Pix

While the research on impression formation and personality assessment at zero-acquaintance has largely looked at the face of the target, the face is by no means the only digital representation being shared between strangers on the internet. In many instances, people will exchange nude images of themselves with potential partners. While this occurs by both parties for various reasons (Maes & Vandenbosch, 2022), men have primarily received attention for their deployment of the “unsolicited dick pic” (Dietzel, 2021). However, while this is traditionally discussed as sexual violence, Dietzel (2021) argued that there are many reasons for men to send pictures of their penises to their potential partners spanning both consensual and non-consensual motivations and it represents a symbolic form of communication between digital partners.

Does Size Matter?

Concerning those with penises, men have a complex relationship with their own penises, which has roots in both socio-gender orientations, as well as personal esteem variables. For example, penis-centric masculinity, defined as masculinity and manhood contingent on penis size, appearance, and functionality, is related to sexism and sexual narcissism (Oswald et al., 2021). Further, penis-centric masculinity predicted the desire for affirmations related to the appearance of genitals (e.g., surprise, fear, excitement). While most men believe that they have an average sized penis (but still desire a larger one), self-esteem towards one's penis seems highly related to general self-esteem, sexual esteem, and positive, overall body image (Amos & McCabe, 2016; Loehle et al., 2017; Simpson & Adams, 2019; Winter, 1989). Positive perceptions of one's penis predicts engagement and satisfaction in sexual activity (Malekjah, 2009; Reinholtz & Muehlenhard, 1995), while negative perceptions towards one's penis relate to sexual difficulties, erectile dysfunction concerns, and higher levels of anxiety and stress (Del Rosso, 2011; Wyatt & de Jong, 2020; Wyatt et al., 2019). Interestingly, Sharp and Oates (2019) reported that while the men in their study did not report ever receiving negative feedback about their genitals, they still pursued penis augmentation for social-comparison reasons

(primarily comparing themselves with pornography actors and peers in the locker room).

While men have mixed feelings about their genitals at best, heterosexual women seem to be surer of their preferences with regard to penis size and appearance. In an ingenious study by Prause and colleagues (2015), women were asked to choose from 33, 3D printed models of penises for the ideal penis for both a one-time partner, as well as a long-term partner. The results found were that women preferred only slightly longer and girther penises for a one-time encounter, as opposed to a long-term partner. However, regardless of the category, both preferences were only slightly above average (6.3/6.4 inches long and 4.8/5.0 inches wide). Thus, while there may be a preference regarding the type of relationship a woman is engaged in in relation to penis size preferences, these preferences do not tend to exceed what both men and women would consider the prototypical penis. Prototypicality could be an important variable to consider, as prototypical behavior is viewed more positively than non-prototypical behavior (Reysen et al., 2015).

Beating Around the Bush

Lastly, an important factor to consider when forming impressions based on digital representations of explicit material involves the personal grooming choices made by the sender of the image. Pubic hair is subject to both trends and fashions for both men and women (Li & Braun, 2016; Ramsey et al., 2009), which are contingent on culture, as well as time. A trimmed pubic hair style may be the most ideal in the present-day Anglosphere (e.g., United States, United Kingdom, Australia; Enzlin et al., 2019). Thus, for the present study, extending the scope of zero-acquaintance perceptions to include pubic hair maintenance, as keeping well-groomed and current on social expectations of fashion may be seen as both prototypical and an indicator of conscientiousness (Casidy, 2012).

Research Questions and Hypotheses

Given the prominence of digital dating, as well as engagement in sexting behaviors, the aim of the present study is to investigate perceptions of penis pictures to understand the underlying assumptions receivers of “dick pix” make regarding their potential romantic or sexual partners. Based on the reviewed literature, the physical attributes of penises may convey particular information to the recipient of a penis picture. For example, both men and women share a perception that the ideal penis is just a little above average in size (Amos & McCabe, 2016; Prause et al., 2015), suggesting that slightly larger penises would be considered prototypical (both in terms of length and girth), and thus lead to more positive or socially desirable associations of the person (Reysen et al., 2015). Additionally, people with trimmed pubic hair (as opposed to no pubic hair or untrimmed public hair) will be perceived as more prototypical and attractive, as well as more conscientious.

To these ends, the present study tested the following hypotheses:

H¹: Prototypicality of a penis would be associated with positive inferences of the person with the penis (specifically, extraversion, openness, agreeableness, attractiveness, sexually active, and sexual performance).

H²: Penises of high girth would be perceived to be more prototypical and attractive than penises with low girth.

H³: Penises of long length would be perceived as more prototypical and attractive than penises of medium and short length.

H⁴: Penises with trimmed pubic hair would be perceived as more prototypical and attractive, as well as the person with the penis being more conscientious.

Method

Participants and Design

Participants ($N=106$, 80.2% women; $M_{\text{age}}=21.56$, $SD=5.12$) received partial course credit toward their psychology course requirement at Texas A&M University-Commerce. Participants indicated their ethnic/racial category as White (31.1%), African American (38.7%), Hispanic/Latino (19.8%), multiracial (6.6%), Indigenous Peoples (1.9%), Asian/South Pacific Islander (0.9%), and Central Asian/Indian/Pakistani (0.9%). Additionally, participants indicated their sexual orientation as heterosexual (86.8%), bisexual (8.5%), and other (4.6%; 1 gay man, 1 lesbian woman, 3 asexuals). After affirming to the informed consent, participants completed a within-subjects zero acquaintance perception task for 24 pictures of penises categorized by girth, length, and amount of pubic hair. The dependent variables of interest were ratings of the person's prototypicality, attractiveness, sexual frequency and performance, as well as big five personality characteristics (Appendix 1). Unless noted otherwise, participants rated items on a 7-point Likert-type response scale, from 1 = *strongly disagree* to 7 = *strongly agree*. Lastly, participants were debriefed and thanked. The present study was approved by the Institutional Review Board at Texas A&M University-Commerce (#1337).

Materials

Stimuli

For the present study, 24 pictures of penises were collected from publicly available reddit forums dedicated for users to share pictures of their genitals. The pictures were categorized into three clusters (girth, length, amount of pubic hair). In the girth cluster, three pictures were subcategorized as low girth, while three pictures were subcategorized as high girth. Similarly, the length cluster included the subcategories of long, medium, and short, with three pictures of penises representing each subcategory respectively. Lastly, the pubic hair cluster included three subcategories for untrimmed pubic hair, trimmed pubic hair, and no pubic hair, each with three pictures a piece. All penises were Caucasian and circumcised; however, the color of

public hair present was not controlled for and ranged from blonde, black, brown, and ginger. To control for order effects, the stimuli presentation was randomized.

Personality

The perceptions of personality were measured utilizing an altered ten-item personality inventory (TIPI; Gosling et al., 2003), whereby participants responded only to the affirming statements regarding openness ($\alpha=0.94$), conscientiousness ($\alpha=0.91$), extraversion ($\alpha=0.92$), agreeableness ($\alpha=0.93$), and neuroticism ($\alpha=0.89$).

Sexual Perceptions

In addition to personality perceptions, participants were also asked to respond to six statements regarding the sexual perception of each target. These novel questions included questions of prototypicality ($\alpha=0.95$) and attractiveness ($\alpha=0.93$), as well as how sexually active ($\alpha=0.91$) and “good in bed” ($\alpha=0.90$) each target was perceived to be. Further, participants responded to how much of a “Pillow Princess” or “Pleaser” the target appeared to be ($\alpha=0.88$) and how many sexual partners they perceived the target might have had.

Results

Analysis of Gender and Sexual Orientation

To examine possible differences between participants based on gender and sexual orientation, we conducted a series of regressions with participant gender (men=0; women=1) and participant sexual orientation (heterosexual=0; LGBQ+=1) as predictors of each of the dependent variables. With the exception of the perceived number of sexual partners, participant characteristics did not significantly predict ratings of the dependent variables (see Table 1). However, for the perceived number of sexual partners, participants who were heterosexual perceived the men associated with the penis pictures to have more sexual partners. Largely, the sample did not significantly differ with regards to gender or sexual orientation when evaluating the penises and the subsequent personality and sexual traits of the people whom the penises belonged.

Penis Prototypicality and Positive Associations

To test the primarily hypothesis that perceptions of prototypicality would be associated with positive perceptions of personality and sexual behavior, we conducted a correlation analysis between the variables (see Table 2). Prototypicality was strongly correlated with perceptions of extraversion, attractiveness, good in bed, conscientiousness, sexuality active, agreeableness, and openness to experiences. Prototypicality was moderately associated with neuroticism and being a pleaser.

Table 1 Regression analysis of participant gender and sexual orientation predicting dependent variables

	Model			Gender			Sexual Orientation		
	<i>F</i>	<i>p</i>	<i>R</i> ²	β	<i>t</i>	<i>p</i>	β	<i>t</i>	<i>p</i>
Prototypically	0.19	0.83	0.004	0.06	0.59	0.56	0.02	0.15	0.88
Attractiveness	0.70	0.50	0.013	− 0.03	− 0.28	0.78	0.11	1.15	0.25
Sexually Active	0.35	0.70	0.007	0.06	0.65	0.52	0.05	0.53	0.60
Good in Bed	0.42	0.66	0.008	− 0.08	− 0.82	0.41	0.04	0.40	0.69
Extraverted	0.19	0.83	0.004	− 0.06	− 0.61	0.54	0.004	0.04	0.97
Conscientious	1.26	0.29	0.024	− 0.14	− 1.43	0.16	− 0.07	− 0.70	0.49
Neurotic	2.28	0.11	0.042	− 0.19	− 10.92	0.06	− 0.09	− 0.95	0.34
Open	0.27	0.77	0.005	− 0.05	− 0.50	0.63	− 0.05	− 0.55	0.59
Agreeable	0.72	0.49	0.014	− 0.11	− 10.16	0.25	− 0.03	− 0.32	0.75
Sexual pleaser	0.01	0.99	0.000	− 0.01	− 0.13	0.90	− 0.01	− 0.09	0.93
Number of sexual partners	40.05	0.02	0.073	0.08	0.80	0.43	− 0.26	− 2.73	0.008

Bolded items are significant at $p < 0.01$

Prototypicality was not associated with the perceived number of sexual partners. In light of prototypical penises being perceived as being more attractive, as well as being associated with positive attributes toward the person with the penis, the first hypothesis was confirmed.

Girth

To test the second hypothesis, the perceptions of penis girth were tested along the personality and sexual dimension the individual scores of the three stimuli in the low-girth and high-girth categories were averaged (see Table 3 for means and standard deviations). Then, to determine if there were meaningful differences in the zero acquaintance perceptions based on penis girth, a one-way repeated measures MANOVA was conducted utilizing all of the personality and sexual perceptions measures, $F(11, 95) = 16.53$, $p = 0.001$, $\eta_p^2 = 0.66$.

There were significant differences between how participants perceived penises with low-girth and high-girth. For targets in the low-girth category, participants perceived them to be more neurotic ($p = 0.020$, $\eta_p^2 = 0.05$). However, for targets in the high girth category, they were perceived to be more extraverted ($p < 0.001$, $\eta_p^2 = 0.29$) and open to new experiences ($p < 0.001$, $\eta_p^2 = 0.25$). Additionally, they were perceived to be more prototypical ($p < 0.001$, $\eta_p^2 = 0.39$), attractive ($p < 0.001$, $\eta_p^2 = 0.45$), more sexually active ($p < 0.001$, $\eta_p^2 = 0.56$), better in bed ($p < 0.001$, $\eta_p^2 = 0.58$), more of a pleaser ($p < 0.001$, $\eta_p^2 = 0.52$), and have more sexual partners ($p < 0.001$, $\eta_p^2 = 0.50$). There were no significant differences observed between the girth categories on perceptions of conscientiousness and agreeableness. The results of the present analysis confirmed the second hypothesis that penises of higher girth would be perceived as more prototypical and attractive.

Table 2 Correlation matrix of assessed variables

	1	2	3	4	5	6	7	8	9	10	11
1. Prototypically	–										
2. Attractiveness	0.48*	–									
3. Sexually active	0.44*	0.61*	–								
4. Good in bed	0.45*	0.74*	0.80*	–							
5. Extraverted	0.51*	0.61*	0.72*	0.81*	–						
6. Conscientious	0.45*	0.50*	0.45*	0.70*	0.79*	–					
7. Neurotic	0.29	0.34*	0.37*	0.56*	0.66*	0.79*	–				
8. Open	0.32*	0.43*	0.65*	0.75*	0.86*	0.73*	0.68*	–			
9. Agreeable	0.40*	0.48*	0.47*	0.71*	0.70*	0.88*	0.71*	0.68*	–		
10. Sexual pleaser	0.19	0.43*	0.52*	0.59*	0.54*	0.42*	0.34*	0.58*	0.42*	–	
11. Number of sexual partners	0.08	0.27	0.44*	0.26	0.20	0.12	0.06	0.22	0.13	0.28	–

* $p < 0.001$

Table 3 Mean (standard deviation) comparisons between penis dimension categories

Variables	Penis categories							
	Low-girth	High-girth	Short-length	Medium-length	Long-length	No-pubes	Trimmed-pubes	Long-pubes
Prototypically	3.40 (1.46)	4.38 (1.28)	3.00 (1.39)	4.09 (1.56)	4.53 (1.62)	4.45 (1.52)	4.80 (1.45)	3.75 (1.67)
Attractiveness	2.39 (1.07)	3.54 (1.37)	2.02 (0.87)	2.67 (1.18)	3.96 (1.63)	3.53 (1.42)	4.14 (1.36)	2.34 (1.18)
Sexually active	3.28 (1.28)	4.81 (1.12)	2.65 (1.01)	4.02 (1.23)	4.92 (1.19)	4.71 (1.17)	5.01 (1.02)	3.66 (1.23)
Good in bed	2.81 (1.03)	4.39 (1.15)	2.46 (0.96)	3.40 (1.05)	4.44 (1.21)	4.25 (1.12)	4.58 (1.09)	3.12 (1.10)
Extraverted	3.42 (1.19)	4.30 (1.18)	3.02 (1.17)	3.76 (1.16)	4.33 (1.15)	4.24 (1.15)	4.42 (1.17)	3.59 (1.16)
Conscientious	3.64 (1.14)	3.87 (0.91)	3.44 (1.20)	3.73 (1.07)	3.85 (1.03)	3.96 (1.07)	3.90 (1.02)	3.43 (1.14)
Neurotic	3.87 (1.10)	3.59 (0.86)	3.77 (1.18)	3.64 (0.98)	3.47 (1.03)	3.57 (1.01)	3.53 (1.00)	3.68 (1.08)
Open	3.66 (1.27)	4.31 (1.11)	3.48 (1.28)	3.94 (1.21)	4.37 (1.27)	4.31 (1.15)	4.40 (1.14)	3.76 (1.27)
Agreeable	3.64 (1.07)	3.68 (0.90)	3.57 (1.15)	3.77 (1.12)	3.59 (0.95)	3.70 (0.92)	3.73 (0.98)	3.53 (1.12)
Sexual pleaser	3.47 (1.27)	4.88 (0.96)	3.15 (1.17)	4.03 (1.06)	5.15 (1.08)	4.66 (1.09)	5.04 (1.05)	3.87 (1.12)
Number of sex partners	2.01 (2.01)	3.18 (1.14)	1.59 (0.96)	2.53 (1.06)	3.29 (1.05)	3.15 (1.17)	3.29 (1.10)	2.39 (1.08)

All variables were measured utilizing a 7-point Likert-type scale

Length

Second, we investigated the differences in participants' perceptions of targets based on the length of the penis across three categories: long, medium, and short (see Table 3 for means and standard deviations). To test differences between the categories, a one-way repeated measures MANOVA was conducted to test the personality and sexual dependent variables, $F(22, 84) = 20.13$, $p < 0.001$, $\eta_p^2 = 0.84$.

With regard to differences between the categories of penises based on length, the targets in the short category were perceived to be more neurotic than targets in the long or medium categories ($p = 0.038$, $\eta_p^2 = 0.03$). However, targets in the long category were perceived to be more extraverted ($p < 0.001$, $\eta_p^2 = 0.38$), conscientious ($p = 0.03$, $\eta_p^2 = 0.06$) and open to new experiences ($p < 0.001$, $\eta_p^2 = 0.20$) than targets in the medium or short categories. Additionally, they were perceived to be more prototypical ($p < 0.001$, $\eta_p^2 = 0.38$), attractive ($p < 0.001$, $\eta_p^2 = 0.52$), more sexually active ($p < 0.001$, $\eta_p^2 = 0.64$), better in bed ($p < 0.001$, $\eta_p^2 = 0.56$), more of a pleaser ($p < 0.001$, $\eta_p^2 = 0.56$), and have more sexual partners ($p < 0.001$, $\eta_p^2 = 0.61$) than targets in the medium or short categories. There were no observed differences for agreeableness across categories, nor were there any significant findings associated with the targets in the medium length category. The results of the present analysis confirmed the third hypothesis that penises of longer length would be perceived as more prototypical and attractive.

Pubic Hair

Lastly, we investigated the differences between three different levels of pubic hair grooming on the same ratings of personality and sexual dependent variables: long, trimmed, and no pubic hair (see Table 3 for means and standard deviations). To test for differences in perceptions, a one-way repeated measures MANOVA was conducted, $F(22, 84) = 10.85$, $p < 0.001$, $\eta_p^2 = 0.74$.

With regard to differences between the categories of penises based on pubic hair length, the targets with long pubic hair were perceived as less extraverted ($p < 0.001$, $\eta_p^2 = 0.23$), conscientious ($p < 0.001$, $\eta_p^2 = 0.13$), agreeable ($p = 0.042$, $\eta_p^2 = 0.031$), open to new experiences ($p < 0.001$, $\eta_p^2 = 0.18$), and have the smallest number of sexual partners ($p < 0.001$, $\eta_p^2 = 0.31$), as compared to the trimmed and no pubic hair penises, which did not significantly differ from each other on the previously stated dependent variables. Targets with trimmed pubic hair were perceived to be more prototypical ($p < 0.001$, $\eta_p^2 = 0.26$), attractive ($p < 0.001$, $\eta_p^2 = 0.52$), sexually active ($p < 0.001$, $\eta_p^2 = 0.41$), better in bed ($p < 0.001$, $\eta_p^2 = 0.48$), and more of a pleaser ($p < 0.001$, $\eta_p^2 = 0.33$) as compared to targets in both the long and shaved pubic hair categories. There were no significant differences observed with regard to neuroticism and targets in the no pubic hair condition were not perceived uniquely from the long and trimmed pubic hair penises. The results of the present analysis confirmed that penises with trimmed pubic hair would be considered more prototypical and attractive (as compared to penises without pubic hair and long pubic hair);

however, targets with trimmed pubic hair were perceived as more conscientious as compared to long pubic hair, without significant difference with shaved pubic hair.

Discussion

The present study aimed to investigate the zero-acquaintance perceptions of penises along the dimensionality of girth and length, as well as by style of pubic hair. Four hypotheses were tested in the present analysis, and each was confirmed. Across all categories, there was a positive relationship between perceived prototypicality and positive variables such as, attractiveness, extraversion, openness, agreeableness, sexually active, and sexual performance. Additionally, penises with higher girth or length were perceived to be more prototypical and attractive. Lastly, penises with trimmed pubic hair were perceived to be more prototypical and attractive; however, while they were perceived to be more conscientious than non-trimmed pubic hair, they did not significantly differ from fully shaved pubic hair.

As digital sexuality and dating become more prevalent (Banerjee & Sathyanarayana, 2021; Courtice & Shaughnessy, 2017; Fisico, 2021; Lehmiller et al., 2021; Nesaibia et al., 2021; Thomas et al., 2021; Maes & Vandenbosch, 2022), the findings of the present study inform the impressions made by potential romantic partners through the exchange of explicit media. While most research has prioritized the face pictures and biographies of potential partners (Anzani et al., 2018; Dai & Robbins, 2021; Ramaker, 2020), the present finding take a step forward to investigate how pictures of penises may contribute to the holistic perception of the person within digital spaces.

Additionally, the present study pushes the theoretical framework of zero-acquaintance personality assessment. Specifically, this research demonstrates that genital appearance may contribute to socially shared implicit theories about people, regardless if these impressions reflect the true personality of the person being assess (Walker & Vetter, 2016). However, according to Alper et al. (2021), humans may form accurate personality assessments from strangers' faces to navigate social dynamics of threat and reproduction. While there was no comparison made between the shared impressions from the participants, and the actual personality characteristics of the people whose penises were used as stimuli, it can be reasonably inferred that a similar process of impression formation is engaged between faces and penises. Should future work find that personality can be accurately inferred via penis appearance, it would be reasonable to postulate the adaptive function of such an inference.

Further, it is important to note that in-line with the findings of Prause et al. (2015), penises that were perceived to be prototypical were also seen as more attractive. However, while in the previously mentioned study, penises slightly above average were perceived as ideal, the present study found that penises with larger girth and length were perceived as prototypical. This could be due to the difference between digital representations and 3D models, as the stimuli used in the present study, while certainly larger than their low girth and medium/short length counterparts, could have been perceived to be more average than they actually were. This

observation suggests that there might be a significant difference between digital representations and physical penises.

Lastly, the present study found that trimmed and shaved pubic hair were perceived as much more ideal than untrimmed pubic hair. These findings are in-line with research regarding the social expectations of pubic hair being regularly groomed (Li & Braun, 2016; Ramsey et al., 2009). However, it was interesting to find that penises with ungroomed pubic hair were perceived quite negatively. These findings echo the observation from Li and Braun (2016) who reported that women in their sample “articulated freedom to practice pubic hair removal,” but perhaps not a “freedom from participating in this practice” (p. 336). While much more work must be conducted to understand the social pressure men face to groom their pubic hair, the significantly low rating for penises with untrimmed pubic hair in the domains of extraversion, conscientiousness, agreeableness, and openness was noteworthy.

Limitations and Future Directions

While the present study presents novel findings regarding the zero-acquaintance personality rating of penises, and how those perceptions change depending on penis dimensionality and pubic hair style, there are some limitation and future directions to consider. First, it is important to acknowledge that the present study attempted to control for perceptual differences between circumcised and uncircumcised penises, as well as the race of the penis. Given that the present study was interested in dimensionality of penis structure, as well as a pubic hair grooming, the authors controlled for circumcision and race because of their socially symbolic meanings of perceptions of sexuality, risk, and pleasure (Morris et al., 2019; Wilson et al., 2009). Future research should investigate the influence of circumcision and race on these perceptions of sexuality and personality.

Secondly, the present study presented the stimuli in a laboratory, not a naturalistic setting. As such, contextual factors, such as relationship motivations of people engaged in online dating, were not tested. It would be worth exploring differences between penis evaluations between those interested in a hook-up or one-night-stand and those interested in a long-term relationship. As demonstrated in Prause et al. (2015), it would be reasonable to expect that those interested in a long-term relationship would prioritize penises closer to the average, and possibly attribute more possible traits to them. Further, the undergraduate participants who engaged in this laboratory study were incentivized with course credit, which may also limit the findings of the present study.

It would be unlikely for someone naturalistically engaging in dating behaviors online to only receive a picture of a potential partner's penis, accompanied by no other details or interactions. To best keep in line with past research regarding zero-acquaintance personality perceptions, the present study relies on presenting the visual stimulus in a vacuum to isolate impression formation at first contact (Albright et al., 1988, 1997). However, one major difference between the present study and the past research in zero-acquaintance personality perception is that within the sexual script, it is more than likely that one will see the face of a potential partner, then

speak with them, and then engage in sexual behavior with them (Brooks, 2017; Gagnon & Simon, 1972). As such, there are several steps through the social process of dating (both in-person and online) where personality impressions can be formed and tailored based on experience. Future studies could develop a dating app paradigm, where the stimuli could be perceived within the context of a conversation between potential partners. Additionally, the present study did not distinguish between a picture of a penis sent consensually or nonconsensually, which would most certainly influence the personality and sexual perceptions of said penis.

Lastly, it is important to note that while the present study did not detect significant differences between participants' gender and sexual orientation with the personality and sexual variables of interest (with the exception of perceived number of sexual partners), this does not rule out the possibility that gender and sexual orientation may play a significant role in the impression formation process. As such, researchers should consider investigating identity level differences between gender and sexual orientation. It is plausible that gay men and heterosexual women might form different impressions from a digital representation of a penis when compared to lesbian women and heterosexual men.

Conclusion

Due to the increase in digital sexuality in the wake of the COVID-19 pandemic and subsequent lockdowns, the present study aimed to understand the personality and sexual impressions formed when observing a picture of a penis. The study was conducted to test and confirm four hypotheses: (1) that prototypical penises were perceived to be more attractive, as well as more socially desirable; (2) that girthier penises were perceived to be more prototypical and attractive; (3) that longer penises were perceived to be more prototypical and attractive; and (4) that penises with trimmed pubic hair were perceived to be more prototypical, attractive, and conscientious. The findings suggest that the perception of a person's penis contributes to a socially shared, theory of a person's personality.

Appendix 1: Materials

Instructions: Rate the above picture on the following items.

Strongly Disagree 1 2 3 4 5 6 7 *Strongly Agree*

1. This is a prototypical/stereotypical penis.
2. This is an attractive penis.
3. This person is sexually active.
4. This person would be good in bed.
5. This person is extraverted, enthusiastic.
6. This person is dependable, self-disciplined.
7. This person is anxious, easily upset.
8. This person is open to new experiences, complex.
9. This person is sympathetic, warm.
10. Would this person be an active member of sex (pleaser) or a passive member in sex (pillow princess)?

Pillow Princess 1 2 3 4 5 6 7 *Pleaser*

11. How many sexual partners do you think this person has had?

None

1

2-5

6-10

10-15

15-20

21+

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