

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



Blatant sexual deception: Content, individual differences, and implications



Flora Oswald a,b, Devinder Khera Kari A. Walton d, Cory L. Pedersen d,*

- ^a Department of Psychology, The Pennsylvania State University, United States of America
- ^b Department of Women's, Gender, & Sexuality Studies, The Pennsylvania State University, United States of America
- ^c Department of Psychology, Western University, Canada
- d Department of Psychology, Kwantlen Polytechnic University, Canada

ARTICLE INFO

Keywords: Narcissism Sexual compulsivity Gender Sexual orientation

ABSTRACT

Given current cultural attention to issues surrounding sexual consent, the issue of sexual deception is pertinent. The current study examined rates of different forms of blatant sexual deception (i.e., intentionally misleading sexual partners) with a focus on individual predictors including demographic correlates and traits of narcissism and sexual compulsivity. We sought to extend existing literature on sexual deception by examining novel forms of deception in a gender- and sexual orientation- diverse sample. Participants (N = 1769) aged 16 to 81 years (M = 26.60) took part in an online study. Results showed no gender differences in overall rates of deception, though men were more deceptive regarding wealth and resources, occupation, and physical characteristics than women. Sexual minorities reported higher rates of sexual deception than heterosexual participants pertaining to sexual orientation and previous partner gender. Participant scores on sexual narcissism and sexual compulsivity were significantly correlated with sexual deception scores. Findings are discussed in relation to how sexual deception can be understood and potentially intervened upon within current cultures of consent.

1. Introduction

Buller and Burgoon (1994) describe deception as "controlling information to alter the target's beliefs or understanding in a way that the deceiver knows is false" (p. 192). Deception is often used to achieve certain valued ends, particularly when there is perceived interference with the achievement of goals (Marelich et al., 2008); deception allows individuals to gain desirable ends that they perceive as unattainable through legitimate means (Hample, 1980). In sexual contexts, intercourse is often the desired goal. Sexual deception may be utilized to achieve intercourse – or some other sexual goal – when some factor (e.g., number of past sexual partners) is perceived as interfering with the ability to attain some sexual end (Marelich et al., 2008). Sexual deception occurs through multiple means (see Marelich et al., 2008); we focus on blatant sexual deception, where individuals knowingly and intentionally mislead intended sexual partners through untrue statements or omission of information (i.e., lying).

Most existing literature on sexual deception has focused either on deception within committed relationships (e.g., Saxe, 1991) or STI-related deception (e.g., Green et al., 2003; Sullivan, 2005). Contemporary issues surrounding sexual consent necessitate re-examination of

sexual deception; behaviors such as 'stealthing' - non-consensual removal of condoms during intercourse (Ebrahim, 2019) - have come to cultural attention recently and were not accounted for in previous studies. Further, the prevalence of sexual deception appears relatively high; 22% of one male sample reported having made false promises in order to obtain sex (Fischer, 1996), while 34% of men and 10% of women in another sample reported having lied to a partner to obtain sex (Cochran & Mays, 1990). In the current study, we sought to conceptually replicate and extend existing literature on sexual deception by examining novel forms of deception such as stealthing. Additionally, we sought to examine sexual deception in a gender- and sexual orientationdiverse sample in order to better understand individual demographic factors contributing to variation in sexually deceptive behavior; previous work has predominantly focused on college student populations and often does not report sexual orientation (e.g., Knox, Schacht, Holt, & Turner, 1993; Marelich et al., 2008; cf. Burdon, 1996). We draw upon existing sexual deception literature, as well as evolutionary theorizing and social psychological understandings of stigmatization, to theorize these individual differences.

Sexual deception has been theorized as a form of coercion given that deception is utilized to obtain consent for sexual activity with a partner

^{*} Corresponding author at: Department of Psychology, Kwantlen Polytechnic University, 12666, 72nd Avenue, Surrey, BC V3W 2M8, Canada. E-mail address: cory.pedersen@kpu.ca (C.L. Pedersen).

who might otherwise be unwilling (DeGue & DiLillo, 2005; Dougherty, 2013). Given the negative consequences of sexual coercion for victims (e.g., Jozkowski & Sanders, 2012), a better understanding of sexual deception could contribute to ensuring healthy sexual interactions. Further, knowledge of sexual deception could inform public health interventions, as deception may lead to increased STI infection rates (e.g., Green et al., 2003; Marelich et al., 2008; Sullivan, 2005). Understanding individual predictors of sexual deception can inform public health efforts by indicating target populations for whom interventions might be most necessary.

1.1. Axes of deception

The content of sexual deceptions typically center on certain domains - particularly, traits which determine viability as a sexual partner. Using blatant deception to avoid problems that would prohibit a sexual interaction - i.e., issues that would make one unviable as a sexual partner - functions well as a mating strategy, as it removes barriers to sexual access (Burdon, 1996). For example, individuals with STI diagnoses may perceive their diagnosis as interfering with attaining intercourse; misrepresenting diagnoses removes this interference (Driskell et al., 2008). Sexual deception has been theorized using social exchange theory, such that people use deception to obtain desired end goals (i.e., sexual intercourse; see Marelich et al., 2008). When this desired end goal is perceived to be blocked, deception is used to circumvent this interference (Marelich et al., 2008); given that certain domains produce much of this interference (i.e., it is valued mate characteristics which either allow or prohibit intercourse), these domains are the ones upon which people tend to deceive (Tooke & Camire, 1991).

Extensive research across disciplines positions certain traits as highly valued mate qualities; for example, generally desirable traits include attractiveness, intelligence, and positive disposition (e.g., Buss et al., 2001; Walter et al., 2020). The relative importance of different mate values may shift depending on a number of factors, including the sexual context (i.e., short-term or long-term mating; e.g., Regan, 1998), and demographic characteristics of the parties involved (e.g., gender, see Walter et al., 2020). We turn to these considerations, specifically demographic characteristics, to theorize potential individual differences in the use of blatant sexual deception.

1.2. Axes of differentiation

1.2.1. Demographic axes

1.2.1.1. Deception by gender. Previous research indicates men are more likely to engage in sexual deception than women (e.g., Cochran & Mays, 1990; Stebleton & Rothenberger, 1993). Accordingly, we hypothesized (H1) that men would report engaging in higher levels of sexual deception than women. Further, previous research has demonstrated a symmetry regarding gender differences in mate selection criteria and gender differences in deception; that is, sexual deception is used to cater to the established values of the desired sex partner's gender (Tooke & Camire, 1991). For example, men report more frequent deception pertaining to dominance and resources (Tooke & Camire, 1991) – values established as being desirable to female partners (e.g., Buss, 1989). Dominance and resources are signalled through, for example, career position, wealth, and older age (Buss, 1989).

Women's appearance and youthfulness, more so than men's, are highly valued mate qualities (e.g., Buss, 1989). Correspondingly, women report more frequently utilizing deception pertaining to appearance (Tooke & Camire, 1991); thus, we expected women to downplay their age and misrepresent their physical characteristics. We hypothesized that (H2) men would be more likely to engage in sexual deception pertaining to dominance and resources, while (H3) women would be more likely to engage in sexual deception pertaining to youth

and appearance.

1.2.1.2. Deception by sexual orientation. Sexual minority individuals face unique concerns regarding identity disclosure. Given the stigmatization and prejudice faced by sexual minorities (Herek & McLemore, 2013; Meyer, 2003), they may conceal or misrepresent their sexual orientation to avoid stigmatization (e.g., a bisexual person might misrepresent themselves as heterosexual; see Sylva et al., 2010). Given that heterosexuality is not stigmatized, similar benefits of misrepresenting sexual orientation are nonexistent for heterosexual individuals. Thus, we hypothesized (H3) that sexual minority individuals would be more likely to deceive about their sexual orientation than would heterosexual individuals.

1.2.2. Trait axes

1.2.2.1. Sexual narcissism. Sexual narcissism is a sexuality-specific subdomain of the clinical construct of narcissism and includes facets of sexual entitlement, sexual exploitation, low sexual empathy, and an inflated sense of sexual skill (Hurlbert et al., 1994; Hurlbert & Apt, 1991). Although sexual narcissism specifically has not been empirically linked to deception, general narcissism is predictive of interpersonal deception in sexuality-relevant domains (Jonason et al., 2014). Extrapolating from these results, we hypothesized (H4) that participants who endorsed higher levels of sexual narcissism would report higher levels of sexual deception. We expected a relationship between sexual narcissism and sexual deception given that sexual narcissism has been linked to coercive and aggressive sexual strategies (Bouffard, 2010; Widman & McNulty, 2009).

1.2.2.2. Sexual compulsivity. Sexual compulsivity is characterized by increased frequency and intensity of sexual fantasies and behaviors that interfere with personal, interpersonal, or vocational pursuits (Black, 1998; Kafka & Prentky, 1994). Individuals may be particularly likely to use deception to circumvent barriers to obtaining sex if need for sex is intense and frequent (i.e., compulsive). Given the similar construct of nonclinical greater need for sex has been demonstrated to predict the use of blatant lying in sexual deception (Marelich et al., 2008), we hypothesized (H5) that participants endorsing higher levels of sexual compulsivity would report higher levels of sexual deception.

2. The current study

We sought to conceptually replicate and extend existing literature on sexual deception by examining novel forms of deception. Additionally, we examined sexual deception in a gender- and sexual orientation-diverse sample to better understand individual demographic factors contributing to variation in sexually deceptive behavior. In one well-powered online study, we asked participants to report on their experiences utilizing blatant sexual deception, and to complete measures of demographics, sexual narcissism, and sexual compulsivity, to test the previously articulated hypotheses.

3. Methodology

3.1. Participants

Our initial data set included 2074 participants with sexual experience. Participants who failed to meet a 75% survey completion cut-off (n=304) or were suspected of trolling (n=1) were removed. The final sample consisted of 1769 participants aged 16 to 81 years (M=26.60; SD=9.65). Table 1 presents participant demographics by gender. Following IRB clearance, participants were recruited from the research participant pool of a medium-sized university and through online sampling (e.g., r/samplesize, Twitter, Facebook, Instagram) using a

Table 1 Participant demographics by gender.

	Men 33.7% (<i>n</i> = 596)	Women 63.0% (<i>n</i> = 1115)	Non-binary 3.3% $(n = 58)$ M = 24.84 (SD = 6.20)	
Age	M = 29.34 ($SD = 12.02$)	M = 25.23 ($SD = 7.92$)		
Sexual orientation	(bD = 12.02)	(0D - 7.52)	(bD = 0.20)	
Heterosexual	69.3%	62.2%	_	
Gay	9.1%	0.4%	5.2%	
Lesbian	_	3.9%	_	
Bisexual/Pansexual	18.1%	30.9%	67.2%	
Asexual	0.7%	1.6%	10.3%	
Specify	0.5%	0.7%	8.6%	
Relationship status				
Single	32.6%	28%	34.5%	
Casually dating	13.1%	14.3%	12.1%	
Non-married committed	30.9%	42.4%	50.0%	
relationship				
Married/civil union	21.3%	13.6%	3.4%	
Separated/divorced	2.0%	1.6%	_	
Widowed	0.2%	0.1%	_	
Monogamous relationship	52.9%	14.2%	32.8%	
Education				
Some high school	5.0%	4.8%	5.2%	
High school diploma	12.6%	12.9%	12.1%	
Some college/university	38.4%	48.6%	37.9%	
Completed undergraduate	24.2%	21.1%	29.3%	
Vocational degree/ certificate	4.2%	2.3%	3.4%	
Postgraduate studies	15.6%	10.2%	12.1%	
Ethnicity	13.070	10.270	12.170	
African/Black	0.8%	1.4%	3.4%	
White	76.0%	63.4%	74.1%	
South Asian (e.g., Indian,	7.6%	15.5%	3.4%	
Pakistani)				
Asian (e.g., Chinese,	4.5%	7.2%	1.7%	
Japanese)				
Indigenous/Aboriginal (e.	0.3%	0.7%	_	
g., First Nations)				
Hispanic/Latin American	3.5%	4.1%	3.4%	
Middle Eastern/North	1.0%	0.7%	1.7%	
African/Arab				
Pacific Islander	0.7%	1.4%		
Multiethnic	4.0%	4.3%	10.3%	
Prefer not to say	1.5%	1.2%	1.7%	

standardized recruitment script drawing from the informed consent form and poster advert recruiting "for a study on deception." All participants accessed the survey through the same Qualtrics URL. No personal identifying information was collected. University student participants earned course credit; community participants were not compensated. ¹

3.2. Design and procedure

Participants over the age of 16 with previous sexual experience were recruited and directed to an online survey. The study was described as "examining the use of deception in sexual contexts". After providing informed consent, participants completed a demographic form, which included questions regarding age, gender, sexual orientation, relationship status, level of education, ethnicity, and sexual experience. Participants who did not qualify for participation were directed out of the survey; qualifying participants responded to the following measures in the order presented. Following completion of the survey, participants received an online debriefing form including contact information, and were directed to contact the principal investigator with any questions

about their participation. Completion of the entire survey took approximately 30 min.

3.3. Measures

3.3.1. Sexual deception questionnaire

To assess sexual deception, we used a modified version of Marelich et al.'s (2008) Sexual Deception Scale (see supplement). The question-naire consists of 26 items responded to on a binary yes/no scale. Each item included the signal phrase "When attempting to initiate a sexual encounter, have you ever..." followed by items including, "Told someone the wrong age (e.g., you said you were 30 when you were actually 36)", and "Told someone something misleading about your professional designation, job, or occupation." Five additional follow-up questions clarified responses. Summed total scores ranged from 0 to 26, with higher scores indicating greater sexual deception ($\alpha=0.83$). Additionally, items can be examined individually to target specific constructs (e. g., age). An exploratory factor analysis revealed seven factors; loadings were poor, so the factor structure was abandoned (see supplement).

3.3.2. Sexual narcissism scale

The Sexual Narcissism Scale (Widman & McNulty, 2008) consists of 20 items examining the degree to which an individual's level of narcissistic personality traits manifest in sexual situations. Example items include "When I want to have sex, I will do whatever it takes" and "I am entitled to sex on a regular basis." Items are scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). After reverse scoring two items, scores are summed to create a total score ranging from 20 to 100; higher scores indicate greater sexual narcissism ($\alpha = 0.86$).

3.3.3. Sexual compulsivity scale

The Sexual Compulsivity Scale (Kalichman et al., 1994) consists of 10 items examining intrusive, compulsive, and uncontrolled sexual thoughts and behavior. Example items include "My sexual appetite has gotten in the way of my relationships" and "I have to struggle to control my sexual thoughts and behavior". Items are scored on a 5-point Likert scale ranging from 0 (*not at all like me*) to 4 (*very much like me*). Items are summed to create a total score ranging from 0 to 40; higher scores indicate greater sexual compulsivity ($\alpha = 0.90$).

4. Results

4.1. Statistical analysis

One-way analysis of variance (ANOVA) and chi square tests of independence were conducted to test our hypotheses. Levene's tests of homogeneity of variance were nonsignificant (p>.05) for ANOVA, and assumptions for chi square were met. Correlations between sexual narcissism, sexual compulsivity, and sexual deception were also conducted.

4.2. Demographic axes of differentiation

4.2.1. Deception by gender

Table 2 displays sexual deception item endorsement by gender. A Bonferroni corrected ANOVA revealed a significant effect of gender, F(2, 1754) = 3.85, p = .021, $\eta_p^2 = 0.004$, though a planned pairwise comparison of H1 indicated that men (M = 3.44, SE = 0.15) and women (M = 3.31, SE = 0.11) did not differ in their levels of sexual deception overall (p = 1.00). Both men (p = .017) and women (p = .032) differed in sexual deception scores from individuals who specified their gender outside the binary (M = 2.04; SE = 0.49).

Next, a chi square test of independence examined whether men would be more likely than women to engage in sexual deception pertaining to the single item of dominance and resources (*H2*). Results

 $^{^{1}}$ Given IRB requirements, the survey was anonymous and information regarding recruitment locations for each participant was not gathered. It is therefore unknown where most of the successful participant acquisition took place.

Table 2Itemized sexual deception endorsement by gender and sexual orientation.

"When attempting to initiate a sexual encounter, have you ever"	Gender			Sexual orientation	
	Men (n = 596)	Women (<i>n</i> = 1115)	Non-binary (<i>n</i> = 58)	Heterosexual (n = 1107)	Sexual minority $(n = 640)$
Told someone you loved them when you didn't.	23.3%a	19.3% _{a,b}	6.9% _b	20.3%a	20.6%a
2. Told someone you cared about them when you didn't.	$21.3\%_{a}$	$18.8\%_{a,b}$	$6.9\%_{b}$	19.1% _a	$19.7\%_{a}$
Told someone you would date them if they engaged in sexual activity with you, even though you didn't actually intend to date them.		3.1% _b	5.2% _{a,b}	5.4% _a	4.7% _a
4. Gotten someone intoxicated without their knowledge (e.g., date rape drugs).		0.5%	_	0.7% _a	0.5%
5. Told someone you were less intoxicated (e.g., drugs or alcohol) than you were.	$0.8\%_{a}$ $28.0\%_{a}$	37.3% _b	17.2% _a	32.7% _a	35.5% _a
Told someone you had been checked for sexually transmitted infections when you hadn't.		9.3% _a	12.1% _a	8.9% _a	12.7 _b
 Told someone that you didn't have a sexually transmitted infection even though you did. 	$1.8\%_{\mathrm{a}}$	$2.1\%_a$	-	$2.0\%_a$	1.9% _a
S. Told someone misinformation about the possibility of transmitting a sexually transmitted infection from a sexual act.		$3.1\%_a$	$1.7\%_a$	2.8% _a	$3.1\%_a$
9. Told someone something about your fertility that was not accurate.	1.5%	6.6% _b	1.7% _{a.b}	4.0% _a	6.3% _b
a. I said I was infertile even though I am fertile so they would have unprotected sex	$0.5\%_{a}$	2.1% _a		1.2%	$2.0\%_{a}$
with me.	0.570a	2.1 /0a	_	1.270a	2.070a
b. I said I was infertile even though I am fertile for another reason.	0.3%	3.0% _a	1.7%	1.4%	3.3%
c. I said I was miertile even though I am fertile for another reason.	$0.5\%_a$ $0.7\%_a$	$1.3\%_{a}$	1./ 70a	$1.4\%_a$ $1.2\%_a$	$0.9\%_a$
	$0.7\%_a$ $4.5\%_a$	1.5% _a 8.5% _b	-	$8.0\%_a$	5.2% _b
10. Told someone that you used contraception (e.g., birth control, condoms, etc.) when you didn't.			_	-	
11. Told someone that you didn't use contraception (e.g., birth control, condoms, etc.) when you did.	3.2% _a	5.4% _a	-	4.8% _a	4.1% _a
12. Told someone something misleading about your desire to have children.	9.3% _a	9.5% _a	5.2% _a	9.7% _a	8.9% _a
a. I said I want children, but I do not.	5.4% _a	4.0% _a	3.4% _a	4.3% _a	4.8% _a
o. I said I do not want children, but I do.	3.9% _a	5.3% _a	$1.7\%_{a}$	5.1% _a	4.1% _a
3. Told someone something misleading about your resources, wealth, or income.	15.8% _a	10.8% _b	6.9% _{a,b}	13.9% _a	9.8% _b
 Told someone something misleading about your professional designation, job, or occupation. 	16.8% _a	12.6% _b	8.6% _{a,b}	14.9% _a	12.3% _a
Told someone something misleading about your sexual orientation.	$15.3\%_{a}$	$12.5\%_{a}$	$10.3\%_{a}$	6.2% _a	25.8% _b
Told someone something misleading about your relationship status.	$23.7\%_{a}$	$24.9\%_{a}$	$17.2\%_{a}$	$25.7\%_{a}$	$22.3\%_{a}$
a. I said I was in a relationship when I wasn't.	$2.9\%_{a}$	$6.0\%_{\rm b}$	$3.4\%_{a}$	$5.9\%_{a}$	$3.3\%_{a}$
o. I said I wasn't in a relationship when I was.	$14.9\%_{a}$	$14.3\%_{\rm b}$	8.6% _b	$15.7\%_{a}$	$12.2\%_{a}$
c. I said my relationship was open or non-monogamous but it wasn't.	$4.9\%_{a}$	$3.1\%_{a}$	$5.2\%_{a}$	$2.8\%_{\rm b}$	5.6% _b
d. I said my relationship was monogamous (with only one person at a time) but it wasn't.		1.1% _a	-	1.0% _a	0.9% _a
 Told someone something misleading about your physical characteristics or appearance (including the size or appearance of your genitals). 	12.4% _a	6.2% _b	5.2% _{a,b}	7.8% _a	8.8% _a
 Told someone something misleading about your attitudes or ideologies (e.g., your opinions on feminism or political policy). 	$19.5\%_a$	15.1% _a	12.1% _a	16.6% _a	16.6% _a
 Told someone a fake name (e.g., you said your name was Kelly when it is actually Samantha). 	14.8% _a	$18.1\%_a$	13.8% _a	$16.3\%_a$	17.8% _a
20. Told someone the wrong age (e.g., you said you were 30 when you were actually 36).	18.5% _a	16.8% _a	$10.3\%_a$	16.9% _a	17.3% _a
. I said I was older than I actually was even though I was underage.	$4.0\%_{a}$	7.4% _b	6.9% _b	4.9% _a	8.4% _a
o. I said I was older than I actually was even though I was of legal age.	$7.4\%_{a}$	5.8% _b	$1.7\%_{c}$	7.3% _b	4.4% _b
c. I said I was younger than I actually was.	6.9% _a	3.5% _a	1.7% _b	4.5% _{a,b}	4.5% _{a,b}
21. Told someone something misleading about how many sexual partners you have had in the past.	34.2% _a	33.2% _a	22.4% _a	35.3% _a	29.7% _b
a. I said I have had less sexual partners than I actually have.	$20.0\%_{a}$	$22.2\%_{b}$	8.6%c	23.7% _a	16.6%a
b. I said I have had more sexual partners than I actually have.	14.3% _a	10.8%a	13.8% _a	11.6% _b	13.0% _b
 Told someone something misleading about the gender of your previous sexual partner(s). 	7.7% _a	7.6% _a	8.6% _a	3.1% _a	15.8% _b
23. Told someone something misleading about who you have had as sexual partners in the past.	25.4% _a	$24.3\%_a$	$13.8\%_a$	$24.2\%_a$	24.7% _a
24. Told someone you wouldn't tell anyone about the encounter, even though you intended to.	14.6% _a	$20.1\%_{b}$	$10.3\%_{a,b}$	$18.2\%_a$	$17.2\%_a$
 Told someone you would not record (video or audio) the sex act, when you actually did. 	5.4% _a	1.6% _b	$1.7\%_{a,b}$	3.1% _a	2.7% _a
Told someone you would not show others a recording of the sex act, when you actually did.	3.7% _a	2.5% _a	1.7% _a	2.3% _a	3.8% _a

Note: Values that do not share subscripts differ at p < .05.

provided support for this hypothesis, $\chi^2(1, N=1711)=8.91, p=.003$, Cramer's V=0.07, with standardized residuals and Bonferroni adjusted post-hoc tests of the row x column differences confirming that men endorsed greater deception about their wealth, income, or resources than women (p<.05). Further, we found significant gender effects for the single item assessing profession/occupation, $\chi^2(1, N=1709)=5.88$, p=.015, Cramer's V=0.06, with standardized residuals and post-hoc tests indicating men more likely to deceive about their professional designation or occupation than women (p<.05).

Next, we tested the hypothesis that women would be more likely than men to engage in sexual deception regarding the items assessing youth and appearance (H3). With respect to appearance, we found significant gender effects opposite to our hypothesis, $\chi^2(1, N=1711)=19.67, p<.001$, Cramer's V=0.11, with standardized residuals and post-hoc tests indicating men more likely than women to mislead about their appearance (p<.01).

With respect to age, a chi square test of independence revealed overall significant differences between men and women, $\chi^2(2, N = 295)$

= 16.88, p < .001, Cramer's V = 0.24, with standardized residuals (p < .05) and Bonferroni adjusted post-hoc tests of the row by column differences indicating that compared to women (3.5%), men (6.9%) endorsed deception about being younger; women (7.4%) endorsed being older than they actually were relative to men (4.0%).

4.2.2. Deception by sexual orientation

We collapsed non-heterosexual participants into a sexual minority category. Table 2 displays sexual deception item endorsement by sexual orientation. Our hypothesis that sexual minority participants were more likely to lie about their sexual orientation than heterosexual participants (H4) was supported, $\chi^2(1, N=1746)=133.41, p<.001$, Cramer's V=0.28. Standardized residuals (p<.001) and Bonferroni adjusted posthoc tests of the row x column differences revealed that sexual minority participants reported more sexual orientation deception (25.8%) than heterosexual participants (6.2%). Sexual minority participants also reported higher levels of deception regarding previous sexual partner gender, $\chi^2(1, N=1746)=91.76, p<.001$, Cramer's V=0.23, with standardized residuals and post-hoc tests indicating that 15.8% of sexual minority compared to 3.1% of heterosexual participants endorsed this item of deception (p<.001).

4.3. Correlational analyses

Results of the correlational analyses revealed that as hypothesized, there were significant correlations between sexual narcissism and sexual deception, r = 0.55, p < .001 and between sexual deception and sexual compulsivity, r = 0.40, p < .001. Sexual narcissism and sexual compulsivity were positively correlated, r = 0.52, p < .001.

5. Discussion

The present study examined the relative prevalence of a variety of forms of blatant deception in sexual contexts, focusing on demographic (i.e., gender and sexual orientation) and trait (i.e., sexual narcissism and sexual compulsivity) predictors of deception. We hypothesized that men would endorse a greater number of deception items, on average, than women. Contrary to our hypothesis, we found no significant gender differences in this regard. This finding may be indicative of shifting cultures surrounding sexual consent and accountability, which may result in men being less likely to engage in deceptive/coercive sexual behaviors (or to report these behaviors), due either to increased awareness of issues surrounding consent or fear of backlash or punishment (e.g., Flood, 2019). Additionally, though men and women may have endorsed the same number of sexual deception items, discrepancies in the frequency of deception may remain. Thus, our findings do not necessarily contradict previous research suggesting that men engage in higher rates of sexual deception.

Despite the similarities between men and women regarding the number of deception items endorsed, gender differences existed in the content of reported deception. Consistent with prior research suggesting that individuals are more likely to lie about desired mate characteristics of the other sex (e.g., Tooke & Camire, 1991), men reported greater deception about wealth, resources, and occupational status than women. Among those who did report lying about their age, men were more likely than women to say that they were younger than they actually were; while women who lied about age were likely to inflate their age, specifically, by saying that they were of legal age when they were underage. These findings may be partially explained by the fact that the mean age of women in our sample was quite low (25.23 years); women may increasingly downplay their age as they get older - a form of deception that our young participants likely deemed unnecessary - whereas men may downplay to more closely match that of their desired partner. Though we expected that men would be likely to inflate their age to signal dominance and access to resources (i.e., desired mate characteristics), changing social contexts may have influenced this result; men may be increasingly motivated to downplay their age when in pursuit of a partner who is significantly younger and/or underage to avoid stigmatization surrounding large age gaps, predatory sexual behavior, and sexual consent – issues that have received increased focus in recent years – and, thus, may attempt to signal dominance and access to resources in other ways.

Previous work examining sexual orientation has evidenced lower levels of sexual deception among gay and bisexual individuals relative to heterosexual individuals (Burdon, 1996). In the present work, we found sexual minority individuals were more likely to report lying about orientation than heterosexual individuals. Moreover, sexual minorities were more likely to lie about the gender of their previous sexual partners – likely because this information could be indicative of sexual orientation. In this way, sexual deception may be strategically employed by sexual minority individuals to protect themselves from heterosexist prejudice and potential harm; deception within this context may serve as a method to maintain privacy and engage in identity concealment.

Finally, we found that higher sexual narcissism and sexual compulsivity were correlated with increased sexual deception. This is consistent with research linking sexual narcissism – an egocentric pattern of sexual behavior (Hurlbert et al., 1994) - with the use of coercive (e.g., deceptive) and aggressive sexual strategies (Bouffard, 2010; Widman & McNulty, 2009, 2020). Narcissistic personality traits are posited to be responsible for increased sexual coercion (e.g., the use of sexual deception) due to self-serving cognitive distortions, inflated sense of entitlement, self-serving empathy, and a generally exploitative approach to relationships (Baumeister et al., 2002; Blinkhorn et al., 2015; Brewer et al., 2019; Jonason et al., 2014). Research has also linked the use of sexual deception to a nonclinical greater need for sex – similar to sexual compulsivity - with the use of deception to obtain sex (Marelich et al., 2008). Taking this finding in tandem with existing research linking sexual narcissism to both sexual preoccupation and compulsivity (see Hurlbert et al., 1994; Hurlbert & Apt, 1991), it is apparent that sexually compulsive individuals may believe that the ends (i.e., obtaining sex) justifies the means (i.e., the use of deception). Sexual narcissism and sexual compulsivity appear to play a significant role in the use of sexually deceptive behaviors; as such, these findings suggest that interventions to address sexual deception should target individuals high in these traits.

6. Limitations and future directions

While our study measured the *number* of variables participants reported deceiving partners about, we did not examine *how often* participants employed such deception. This may explain why we found the number of variables participants deceived on to be low– three items on average – as rates of deception could be high but centered on specific variables. Further, our study did not examine the relationships participants had to the individuals they reported deceiving, which would foster a more robust understanding of the contexts in which sexual deception occurs.

Participants may have also been dishonest in their responses to the sexual deception questionnaire (e.g., due to social desirability concerns), despite our attempts to emphasize participation anonymity and confidentiality throughout the survey. Future studies could seek to control for dishonest sexual deception related responses by integrating a single self-report Likert-type scale measuring respondent's honesty. Finally, most of our sample self-identified as heterosexual and White. As such, we expect that our results generalize to white adult heterosexuals and caution against generalizing to narrower segments of ethnic, sexual, and gender minority groups (e.g., non-binary participants, asexual participants, ethnocultural minorities, etc.). Future research on sexual deception behaviors should seek to test and expand the generalizability of the current findings, especially in these under-represented groups.

Sexual deception research has largely focused on differences between men and women, explicating how those differences are affected by gender roles and desired mate characteristics (e.g., Buss, 1989; Tooke & Camire, 1991); that non-binary individuals do not relate to binary gender roles may explain their decreased rates of sexual deception, as signalling traditional, gendered mate characteristics to attract a partner may contradict their own gender identity/expression. Further, it is possible that non-binary individuals may engage in sexual deception not captured in the current study, given the forms of deception addressed here are drawn from literature and theorizing centered on cisgender mating. Future studies should further examine non-binary individuals' engagement in sexual deception.

6.1. Implications and conclusions

Given the nuanced ways in which people use sexual deception (e.g., identity concealment), this study illustrates a need for further research in this area, particularly with diverse populations (e.g., specific sexual minority groups). The present findings aligned with much existing literature on sexual deception, but provided novel insight into deception by gender and sexual orientation; additionally, we extended existing literature to accommodate for contemporary forms of sexual deception including "stealthing." The gravity of the issue of sexual deception is highlighted by some of our findings in particular; for example, the finding that over 5% of our participants had misrepresented their age when underage could be indicative of some participants potentially having deceived partners into committing statutory rape. Further, deception about fertility and STI status was relatively common; deception on both axes has been prosecuted in courts of law (e.g., Lowbridge, 2019). Future research should consider the possibility of developing interventions to reduce sexual deception; consent education may be a first step. Our results also suggest targeted intervention to decrease rates of sexual deception among individuals with higher traits of sexual compulsivity and sexual narcissism.

CRediT authorship contribution statement

First author – conceptualized research idea and design. Wrote the Introduction section, and all revisions to that section. Overall editorial review.

Second author – developed the survey file, conducted reliability assessments of measures, wrote the Methods section, and contributed to sections of the Discussion section.

Third author – wrote the Discussion section, and all revisions to that section. Overall editorial review.

Fourth author – principle investigator and Lab Director. Conducted statistical analyses and wrote the Results section. Overall editorial review

Declaration of competing interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article. Portions of this paper were presented at the online annual meeting of the Society for the Scientific Study of Sexuality (2020).

Acknowledgement

Special thanks to Amanda Champion and Lacey Shorter for editorial comments on previous editions of this manuscript.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.paid.2021.111118.

References

- Baumeister, R. F., Catanese, K. R., & Wallace, H. M. (2002). Conquest by force: A narcissistic reactance theory of rape and sexual coercion. *Review of General Psychology*, 6(1), 92–135. https://doi.org/10.1037/1089-2680.6.1.92.
- Black, D. W. (1998). Compulsive sexual behavior: A review. Journal of Psychiatric Practice, 4(4), 219–229.
- Blinkhorn, V., Lyons, M., & Almond, L. (2015). The ultimate femme fatale? Narcissism predicts serious and aggressive sexually coercive behaviour in females. Personality and Individual Differences, 87, 219–223. https://doi.org/10.1016/j.paid.2015.08.001.
- Bouffard, L. A. (2010). Exploring the utility of entitlement in understanding sexual aggression. *Journal of Criminal Justice*, 38(5), 870–879. https://doi.org/10.1016/j. jcrimjus.2010.06.002.
- Brewer, G., De Griffa, D., & Uzun, E. (2019). Dark triad traits and women's use of sexual deception. Personality and Individual Differences, 142, 42–44. https://doi.org/ 10.1016/j.paid.2019.01.033.
- Buller, D. B., & Burgoon, J. K. (1994). Deception: Strategic and non-strategic communication. In J. A. Daly, & J. M. Wiemann (Eds.), Strategic interpersonal communication (np. 191–224). Erlbaum
- Burdon, W. M. (1996). Deception in intimate relationships: A comparison of heterosexuals and homosexuals/bisexuals. *Journal of Homosexuality*, 32, 77–93. https://doi.org/10.1300/J082v32n01_06.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12(1), 1–14. https://doi.org/ 10.1017/S0140525X00023992.
- Buss, D. M., Shackelford, T. K., Kirkpatrick, L. A., & Larsen, R. J. (2001). A half century of mate preferences: The cultural evolution of values. *Journal of Marriage and Family*, 63 (2), 491–503. https://doi.org/10.1111/j.1741-3737.2001.00491.x.
- Cochran, S. D., & Mays, V. M. (1990). Sex, lies, and HIV. The New England Journal of Medicine, 322(11), 774–775. https://doi.org/10.1056/NEJM199003153221111.
- DeGue, S., & DiLillo, D. (2005). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion. Aggression and Violent Behavior, 10(4), 513–532. https://doi.org/10.1016/j.avb/2004.09.001
- Dougherty, T. (2013). Sex, lies, and consent. *Ethics, 123*(4), 717–744. https://doi.org/
- Driskell, J. R., Salomon, E., Mayer, K., Capistrant, B., & Safren, S. (2008). Barriers and facilitators of HIV disclosure: Perspectives from HIV-infected men who have sex with men. *Journal of HIV/AIDS & Social Services*, 7(2), 135–156. https://doi.org/10.1080/ 15381500802006573.
- Ebrahim, S. (2019). I'm not sure this is rape, but: An exposition of the stealthing trend. SAGE Open, 9(2), 1–11. https://doi.org/10.1177/2158244019842201.
- Fischer, G. J. (1996). Deceptive, verbally coercive college males: Attitudinal predictors and lies told. Archives of Sexual Behavior, 25(5), 527–533. https://doi.org/10.1007/ BF02437546.
- Flood, M. (2019). Men and #MeToo: Mapping men's responses to anti-violence advocacy. In B. Fileborn, & R. Loney-Howes (Eds.), MeToo and the politics of social change (pp. 285–300). Palgrave Macmillan.
- Green, J., Ferrier, S., Kocsis, A., Shadrick, J., Ukoumunne, O. C., Murphy, S., & Hetherton, J. (2003). Determinants of disclosure of genital herpes to partners. Sexually Transmitted Infections, 79(1), 42–44. https://doi.org/10.1136/sti.79.1.42.
- Hample, D. (1980). Purposes and effects of lying. Southern Speech Communication Journal, 46(1), 33–47. https://doi.org/10.1080/10417948009372474.
- Herek, G. M., & McLemore, K. A. (2013). Sexual prejudice. Annual Review of Psychology, 64(1), 309–333. https://doi.org/10.1146/annurev-psych-113011-143826.
- Hurlbert, D. F., & Apt, C. (1991). Sexual narcissism and the abusive male. *Journal of Sex & Marital Therapy*, 17(4), 279–292. https://doi.org/10.1080/00926239108404352.
- Hurlbert, D. F., Apt, C., Gasar, S., Wilson, N. E., & Murphy, Y. (1994). Sexual narcissism: A validation study. *Journal of Sex & Marital Therapy*, 20(1), 24–34. https://doi.org/ 10.1080/00926239408403414.
- Jonason, P. K., Lyons, M., Baughman, H. M., & Vernon, P. A. (2014). What a tangled web we weave: The Dark Triad traits and deception. *Personality and Individual Differences*, 70, 117–119. https://doi.org/10.1016/j.paid.2014.06.038.
- Jozkowski, K. N., & Sanders, S. A. (2012). Health and sexual outcomes of women who have experienced forced or coercive sex. Women & Health, 52(2), 101–118. https:// doi.org/10.1080/03630242.2011.649397.
- Kafka, M. P., & Prentky, R. A. (1994). Preliminary observations of DSM-III—R Axis I comorbidity in men with paraphilias and paraphilia-related disorders. *The Journal of Clinical Psychiatry*, 55(11), 481–487.
- Kalichman, S. C., Adair, V., Rompa, D., Multhauf, K., Johnson, J., & Kelly, J. (1994). Sexual sensation-seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. *Journal of Personality Assessment*, 62, 385–397. https://doi.org/10.1207/s15327752jpa6203_1.
- Lowbridge, C. (2019, September 19). Jason Lawrence appeals against vasectomy lie rape convictions. BBC News. https://www.bbc.com/news/uk-england-leicestershire
- Knox, D., Schacht, C., Holt, J., & Turner, J. (1993). Sexual lies among university students. College Student Journal., 27(2), 269–272.
- Marelich, W. D., Lundquist, J., Painter, K., & Mechanic, M. B. (2008). Sexual deception as a social-exchange process: Development of a behavior-based sexual deception scale. *Journal of Sex Research*, 45(1), 27–35. https://doi.org/10.1080/ 00224490701596176.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674.

- Regan, P. C. (1998). Minimum mate selection standards as a function of perceived mate value, relationship context, and gender. *Journal of Psychology & Human Sexuality*, 10 (1), 53–73. https://doi.org/10.1300/J056v10n01_04.
- Saxe, L. (1991). Lying: Thoughts of an applied social psychologist. *American Psychologist*, 46(4), 409–415. https://doi.org/10.1037/0003-066X.46.4.409.
- Stebleton, M. J., & Rothenberger, J. H. (1993). Truth or consequences: Dishonesty in dating and HIV/AIDS-related issues in a college-age population. *Journal of American College Health*, 42(2), 51–54. https://doi.org/10.1080/07448481.1993.9940458.
- Sullivan, K. M. (2005). Male self-disclosure of HIV-positive serostatus to sex partners: A review of the literature. *Journal of the Association of Nurses in AIDS Care*, 16(6), 33–47. https://doi.org/10.1016/j.jana.2005.09.005.
- Sylva, D., Rieger, G., Linsenmeier, J. A., & Bailey, J. M. (2010). Concealment of sexual orientation. Archives of Sexual Behavior, 39(1), 141–152. https://doi.org/https://doi.org/10.1007/s10508-008-9466-2.
- Tooke, W., & Camire, L. (1991). Patterns of deception in intersexual and intrasexual mating strategies. Ethology and Sociobiology, 12(5), 345–364. https://doi.org/https://doi.org/10.1016/0162-3095(91)90030-T.
- Walter, K. V., Conroy-Beam, D., Buss, D. M., Asao, K., Sorokowska, A., Sorokowski, P., Amjad, N., Anjum, A., Atama, C. S., Duyar, D. A., Ayebare, R., Batres, C., Bendixen, M., Bensafia, A., Bizumic, B., Boussena, M., Butovskaya, M., Can, S., Cantarero, K., ... & Zupančič, M. (2020). Sex differences in mate preferences across 45 countries: A large-scale replication. Psychological Science, 31(4), 408–423. https://doi.org/https://doi.org/10.1177/0956797620904154.
- Widman, L., & McNulty, J. K. (2008, August). Sexual narcissism and the confluence model of sexual aggression [paper presentation]. Boston, MA: American Psychological Association annual meeting.
- Widman, L., & McNulty, J. K. (2009). Sexual narcissism and the perpetration of sexual aggression. Archives of Sexual Behavior, 39(4), 926–939. https://doi.org/htt ps://doi.org/10.1007/s10508-008-9461-7.
- Widman, L., & McNulty, J. K. (2020). Sexual narcissism scale. In R. R. Milhausen, J. K. Sakaluk, T.D. Fisher, C. M. Davis, & W. L. Yarber (Eds.), Handbook of sexuality-related measures (4th ed., pp. 552–554). Routledge.