ORIGINAL PAPER



Leading Better Sex Lives: Is Trait Charisma Associated with Higher Sexual Desire and Satisfaction in Romantic Relationships?

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Received: 24 July 2020 / Revised: 20 August 2021 / Accepted: 25 August 2021 © Crown 2021

Abstract

Sexuality is a key predictor of relationship satisfaction, but sexual desire and satisfaction can be difficult to maintain over time. Past research has investigated who might be more likely to experience higher (compared to lower) levels of desire and sexual satisfaction in their relationships. Certain aspects of personality, such as extraversion, have been associated with sexual satisfaction and desire, but evidence linking personality to sexual outcomes has generally been mixed, meaning there is a lot left to learn about how personality is associated with sexual well-being. A promising, yet unexplored, trait that could be associated with higher sexual desire and satisfaction is charisma—a combination of influence and affability that has been identified as a desirable trait when people are selecting a romantic or sexual partner. Across two studies—a cross-sectional study of individuals in relationships (N=413) and a 21-day dyadic daily experience study (N=121 couples)—people higher in charisma reported being more communal during sex and reported higher sexual desire and satisfaction. Through higher sexual communal strength, people with a charismatic partner also reported higher daily sexual desire and sexual satisfaction. The effects were largely retained above and beyond general communal strength and Big Five personality dimensions, although in Study 1, charisma was no longer associated with sexual desire and satisfaction when controlling for extraversion. The current findings provide initial evidence that charismatic people tend to be responsive to their partner's sexual needs, which is associated with higher desire and sexual satisfaction in romantic relationships.

Keywords Charisma · Sexual communal strength · Sexual satisfaction · Sexual desire

Introduction

Satisfying romantic relationships are one of the strongest predictors of happiness and life satisfaction (Coombs, 1991; Diener & Seligman, 2002) and sexual desire and satisfaction can be important aspects of maintaining overall relationship satisfaction (Butzer & Campbell, 2008; Impett et al., 2008; McNulty et al., 2016). However, on average, people experience lower sexual desire and sexual satisfaction over time (Impett et al., 2014; Klusmann, 2002; Schmiedeberg & Schroder, 2016) and a lack of interest in, or enjoyment of, sex are cited as reasons for ending a relationship (Regan, 2000; Sprecher, 1994, 2002;

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10508-021-02138-x.

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Published online: 17 September 2021

Yabiku & Gager, 2009). Despite these average declines, some people are able to maintain desire and satisfaction decades into a relationship (Acevedo & Aron, 2009).

Investigating how individual differences are associated with sexual desire and satisfaction in relationships may be important for understanding how couples can maintain desire and satisfaction; however, the results of past research have been mixed. For example, some research has found that Big Five personality dimensions, such as extraversion, are associated with higher sexual satisfaction and desire (Allen & Desille, 2007; Costa et al., 1992; Heaven et al., 2000; Kurpisz et al., 2016; Shafer, 2001), but these associations have been inconsistent in other studies (Donnellan et al., 2004). Overall, many questions still remain about who may be better able to maintain sexual desire and satisfaction in romantic relationships. One individual difference that has yet to be explored in the context of romantic relationships but may play a unique role in the maintenance of sexual desire and satisfaction is charisma—the quality of being influential and likable.



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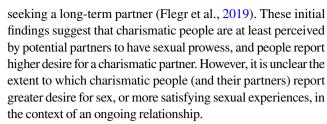
Charisma

Charisma has primarily been investigated in the context of leadership and workplace interactions. Leaders higher in charisma are typically described as inspiring, tend to communicate their vision effectively, and motivate others toward a common goal (House, 1977; Weber, 1978). They also promote higher performance (Balkundi et al., 2011; Bass, 1985; Nohe et al., 2013), greater job satisfaction (Erez et al., 2008; Shamir et al., 1993; Vlachos et al., 2013), and lower levels of aggression (Hepworth & Towler, 2004) among their colleagues. Charismatic people tend to make others feel comfortable, fostering more positive and less negative affect (Erez et al., 2008), and can inspire change and innovation (Paulsen et al., 2009). The bulk of research on trait charisma has focused on leaders in organizational contexts and the outcomes for their colleagues or employees, yet the role of charisma in other contexts, such as romantic relationships, is not well understood.

When investigated outside of leadership and workplace contexts, general charisma is described as a mix of influence and affability. That is, in everyday life, charismatic people tend to have a strong presence in a room and the ability to lead a group, as well as being approachable and displaying positive affect (Tskhay et al., 2018). In this work, charisma is found to be observable in others—people who self-report as being charismatic are also seen as charismatic by others. Charisma is also shown to be distinct from other individual differences, such as extraversion and agreeableness, and charismatic people are perceived by others as likable and persuasive (Tskhay et al., 2018). Although charisma has been associated with aspects of negative traits, such as narcissism, research suggests that charismatic people might present as confident and self-assured like those high in narcissism, but charisma is distinct from the antagonistic or defensive features of narcissism (Rogoza & Fatfouta, 2020). Although initial work has documented correlates of charisma outside of work-related contexts, it is not yet known how charismatic people experience more intimate interactions, such as those with a romantic partner.

Charisma and Sexuality in Relationships

Although no previous work has investigated whether being charismatic or having a charismatic partner helps people maintain desire and sexual satisfaction, recent work has begun to provide insight into the association between charisma and sexuality. Specifically, only one study to our knowledge has considered the role of charisma in the desirability of a sexual or relational partner. In a study exploring partner preferences for short- and long-term relationships, when men and women were asked what qualities they preferred in a partner for a one-night stand, one of the most important qualities was charisma and, for men, charisma was also one of the most important qualities when



The bulk of the previous research that we draw on to support our claim that charisma is associated with sexual desire and satisfaction for both partners in a relationship is from findings about charisma in other, broader contexts. Charismatic leaders tend to be happier, report greater life satisfaction (Nassif et al., 2021), and have more positive interactions with others, in part because they are seen as effective and attractive (Bono & Ilies, 2006). In workplace contexts, charismatic people are also described as passionate and report greater enthusiasm and enjoyment in their work (Ho & Astakhova, 2020; Vallerand, 2015). High levels of work passion in charismatic leaders are also associated with colleagues feeling more passionate about their work (Ho & Astakhova, 2020), as well as more positive impacts on work attitudes, behaviors, and well-being (Vallerand et al., 2014), relationship quality with colleagues (Philippe et al., 2010), and job and life satisfaction (Ho & Astakhova, 2020). If features of a charismatic personality involve passionate engagement with important aspects of life and the ability to inspire and excite others (Conger & Kanungo, 1998), it is possible that charismatic people also report higher sexual desire and satisfaction in their intimate relationships and may have partners who report higher desire and satisfaction as well.

The Role of Sexual Communal Strength

One reason why charismatic people might report higher sexual desire and satisfaction is due to their communal motivation to meet the needs of others. Indeed, people who are charismatic often aim to understand the needs of others and may be particularly skilled at intuiting other people's needs or interests. For example, charismatic leaders focus their attention on issues that are important to colleagues (Pillai et al., 2003), are more empathetic, and pay more attention to their colleagues' needs to encourage personal development (Bass, 1985). Related to their communal approach with others, charismatic people tend to promote a collective identity among their colleagues—that is, a bond that makes their colleagues feel unified and acknowledges each member's distinct strengths (Conger et al., 2000; House & Howell, 1992; Shamir et al., 1993). Communal relationships consist of members feeling a responsibility for meeting each other's needs and providing benefits to one another noncontingently (Clark & Mills, 1979). When colleagues feel they have a shared identity (i.e., when their relationship is communal in nature), this can increase collective endeavors that will be favored over self-interests (Meindl & Lerner, 1983). Placing an emphasis on a collective identity in the workplace can also



lead to greater commitment to the group's values and effort toward tasks (Salancik, 1977; Shamir et al., 1993). In romantic relationships, valuing a collective identity may allow partners to feel more committed toward one another, which is an important component of maintaining relationship and sexual satisfaction (Duffy & Rusbult, 1986; Sprecher, 2002). In addition, having a communal orientation in romantic relationships is linked to higher personal and interpersonal well-being for both partners (Le et al., 2018).

Although the association between charisma and communal motivation has primarily been investigated in the context of building a collective identity among work colleagues, communal motivation is a particularly important factor in the quality of sexual relationships. Communal motivation in the specific domain of sexuality, or sexual communal strength, is the motivation to be responsive to a partner's sexual needs (Muise & Impett, 2016; Muise et al., 2013). Broadly, past research has found that people higher, compared to lower, in sexual communal strength report higher sexual desire and satisfaction, and are better able to maintain their sexual desire over time (Muise & Impett, 2015; Muise et al., 2013). People higher in sexual communal strength also tend to be more likely to engage in sex with their partner even when they are not in the mood and are more open-minded to their partner's preferences (Muise & Impett, 2015). In turn, partners of people with high sexual communal strength often report greater relationship and sexual satisfaction, desire, and commitment (Burke & Young, 2012; Muise & Impett, 2015; Muise et al., 2013).

Given that charismatic people emphasize a collective identity (House & Howell, 1992; Shamir et al., 1993) and are able to intuit other people's needs (Bass, 1985; Pillai et al., 2003), charismatic people may also be more partner-focused in their sexual relationships. Although it is likely that charismatic people will generally be more communal in their relationships, given that charismatic people are seen as desirable sexual partners (Flegr et al., 2019) and tend to be passionate in other domains (Ho & Astakhova, 2020), they may be particularly likely to be communal in the sexual domain of relationships, above and beyond their general communal tendencies. In turn, higher sexual communal strength should then be associated with higher desire and sexual satisfaction for charismatic people and their partners.

The Current Study

Across two studies, we aimed to explore whether charismatic people report higher sexual desire and sexual satisfaction in the context of romantic relationships. In our first study, we conducted a preregistered (https://osf.io/5hegp/) cross-sectional online study as an initial test of the association between charisma, sexual desire, and sexual satisfaction. In this study, we also aimed to rule out alternative explanations for any associations between charisma and sexual quality, such as whether any effects were driven by general communal strength, Big Five

personality traits, or narcissism. In our second study, we utilized data from a dyadic daily experience study to replicate and extend our findings from Study 1 in the context of couples' daily lives, and to test whether any associations between charisma and sexual quality extended to the partners of charismatic people. We also tested whether charismatic people were more communal in their daily sexual experiences and if this accounts for the associations with sexual desire and satisfaction.

Study 1

Method

Participants and Procedure

First, we conducted a power analysis to inform the sample size for our preregistered study. The sample size was based on the smallest effect size from a pilot study which included the key variables of interest (see Supplement for details and findings of the pilot study). To detect a small effect size with an α =0.05, and 95% power, we needed a sample of 353 people. However, we oversampled to account for attrition and inattentive responding. We initially recruited 453 people, but 40 were removed for not meeting eligibility criteria or for completing less than 70% of the survey. Our final sample included 413 people in relationships (see Table 1 for more detailed demographic information).

We recruited participants using Prolific, an online recruitment website (https://www.prolific.co/). Eligibility criteria for the study included being at least 18 years of age, in a romantic relationship, and currently residing in Canada, the U.S., or the UK. If participants were eligible and interested in participating in the study, they were given a link to the online Qualtrics survey that took approximately 30 min to complete. Participants were compensated the equivalent of \$2.85 CAD (\$2.19 USD, £1.67 GBP) for their participation in the study.

Measures

In addition to our measures of interest, participants reported demographic information such as their age, gender, relationship duration, relationship status, ethnicity, and sexual orientation. See Table 2 for correlations, means, and SD of our main demographics and measures of interest. We report the reliability of our measures below using two indicators:

¹ In Study 1, we intended on oversampling from 353 to 390 participants to account for potentially losing participants due to our exclusion criteria. Due to the way Prolific recruits participants, when we closed our study we had 453 submissions. After removing participants due to incompleteness or not meeting our eligibility criteria, the remaining sample was 413 participants. All participants completed at least 70% of the study, passed attention checks, and were compensated for their participation. We only conducted analyses on the final sample, after applying our exclusion criteria.



Table 1 Demographic statistics of Study 1 and 2

Demographic	Study 1 ($N = 41$)	3)	Study 2 ($N=121$ couples)		
	\overline{M} or n	SD or %	\overline{M} or n	SD or %	
Age (years)	36	11.3	32.6	10.2	
Relationship length (years)	11.8	10.3	8.5	8.4	
Gender					
Female	290	70.2	124	51.2	
Male	115	27.8	115	42.5	
Other	6	1.5	3	1.2	
Relationship status					
Dating	59	14.3	3	1.2	
Cohabiting	88	21.3	71	29.3	
Common-law	25	6.1	33	13.6	
Married	215	52.1	113	46.7	
Engaged	19	4.6	19	7.9	
Other or did not specify	7	1.7	3	1.2	
Ethnicity					
White	348	84.3	158	65.3	
Black	9	2.2	11	4.5	
Asian	21	5.1	38	15.7	
Latin American	12	2.9	10	4.1	
Other or did not specify	23	5.6	25	10.3	
Sexual orientation					
Heterosexual	336	81.3	197	81.4	
Bisexual	41	9.9	22	9.1	
Gay or lesbian	7	1.7	8	3.3	
Other or did not specify	29	7	15	6.2	

coefficient alpha (α ; Cronbach, 1951) and coefficient omega (Ω ; McDonald, 1999).²

Charisma

Charisma was assessed using the General Charisma Inventory (GCI) which includes six items measured on a 5-point Likert scale (1="Strongly disagree" to 5="Strongly agree") (Tskhay et al., 2018). The measure is composed of two subscales each with three items—influence (e.g., "Has the ability to influence people") and affability (e.g., "Makes people feel comfortable"). We assessed people's own self-reported charisma (α =0.78, CI [0.733, 0.806], Ω =0.78, CI [0.730, 0.811]), as well as their perceptions of their partner's charisma (α =0.83, CI [0.796, 0.856], Ω =0.81, CI [0.757, 0.841]).

Sexual Satisfaction

Sexual satisfaction was assessed using the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1998). Participants responded to five 7-point bipolar items about their sexual relationship: "bad" to "good," "unpleasant" to "pleasant," "negative" to "positive," "unsatisfying" to "satisfying," and "worthless" to "valuable" (α =0.96, CI [0.944, 0.964], Ω =0.96, CI [0.945, 0.966]).



² Our measure of charisma was moderately skewed in both studies (although the skewness was within acceptable levels based a on cutoff between ± 1 ; Bulmer, 1979; Hair et al., 2017; Ramos et al., 2017; Tabachnick & Fidell, 2013). Based on a comment from a reviewer, we conducted two sensitivity analyses; one with the top 10% of charismatic people removed and the other with the bottom 10% of charismatic people removed. In Study 1, the results of the sensitivity analyses suggested charisma was significantly associated with sexual satisfaction, desire, and sexual communal strength even when the highest and lowest scoring people on charisma were removed from the study, and the effects were largely similar in magnitude. In Study 2, there was no significant association between actor or partner charisma and sexual satisfaction or desire when the top or bottom 10% of people in charisma were removed from the study, possibly due to the reduced power, and the effects were similar in magnitude. The association between an actor's charisma and their sexual communal strength remained when the top 10% of charismatic people were removed, suggesting the effect is not driven by those highest in charisma, but was nonsignificant when the bottom 10% were removed.

Table 2 Means, SDs, and Correlations for Study 1 (N=413)

Variable	M	SD	1	2	3	4	S	9	7	~	6	10	11	12
1. Age	36.10	11.42												
2. Relationship duration (in years)	11.79	10.34	**62.											
3. Charisma	3.66	89.	80.	80.										
4. Perceived partner Charisma	3.87	.75	12*	- 00	.25**									
5. Sexual desire	3.43	1.10	25**	25**	.22**	.27**								
6. Sexual satisfaction	5.75	1.36	08		.19**	.28**	.42**							
7. Sexual communal strength	2.76	.70	04	04	.19**	.32**	.58**	.35**						
8. Communal strength	8.17	1.38	.17**	.17**	*11*	.23**	.24**	.36**	.46**					
9. Extraversion	3.01	.71	.15**	.13*	**69`	.15**	.22**	.23**	.20**	.07				
10. Agreeable	3.77	.58	.24**	.19**	.33**	.13*	.10*	.17**	.16**	.31**	.22**			
11. Conscientious	3.11	4	.13*	.14**	.15**	*11*	.05	.07	90:	.16**	.26**	80.		
12. Negative emotionality	2.99	88.	26**	17**	37**	10*	90. –	12*	10	05	49**	29**	24**	
13. Openness	3.78	69:	60.	.03	.28**	*01.	80.	.01	.21**	.20**	.28**	.29**	80.	14**

*p < .05. **p < .01. Variables 3-4, and 9-13 were measured from 1 to 5, variable 7 was measured from 0 to 4, variable 8 was measured from 0 to 10, and variables 5-6 were measured from 1 to 7



Sexual Desire

Sexual desire was measured using two items assessing a person's level of sexual desire over the last 4 weeks adapted from the Sexual Desire Inventory (Spector et al., 1996). Items include: "Over the past 4 weeks, how often did you feel sexual desire or interest for your partner?" (1 = "Almost never or never" to 5 = "Almost always or always") and "Over the past 4 weeks, how would you rate your level (degree) of sexual desire or interest?" (1 = "Very low or none at all" to 5 = "Very high"; α = 0.87, CI [0.831, 0.901], Ω = 0.88, CI [0.829, 0.902]).

Communal Strength

Communal strength was measured using the 10-item Communal Strength Scale (Mills et al., 2004). Items were rated on an 11-point Likert scale (0="Not at all" to 10="Extremely") and include: "How far would you be willing to go to visit your partner?" (α =0.89, CI [0.875, 0.911], Ω =0.89, CI [0.871, 0.909]).

Sexual Communal Strength

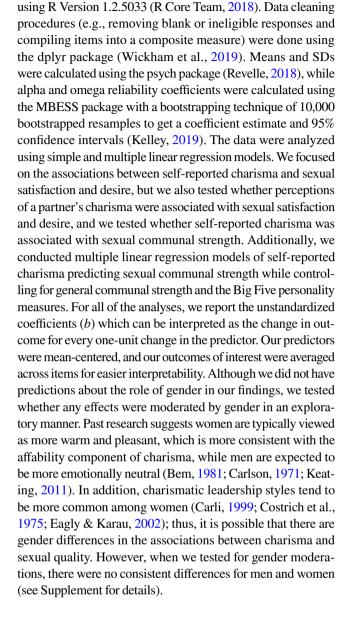
Sexual communal strength was measured using the 6-item Sexual Communal Strength Scale (Muise et al., 2013). Items were rated on a 5-point Likert scale (0="Not at all" to 4="Extremely") and include: "How far would you be willing to go to meet your partner's sexual needs?" (α =0.81, CI [0.767, 0.842], Ω =0.81, CI [0.767, 0.842]). There are two reverse-scored items.

Big Five Personality

The Big Five personality dimensions were measured using the Big Five Inventory-2 (Soto & John, 2017). This measure includes five subscales with 12 items each assessing extraversion (e.g., "Is outgoing, sociable," $\alpha = 0.86$, CI [0.835, 0.878], $\Omega = 0.86$, CI [0.831, 0.878]), agreeableness (e.g., "Is compassionate, has a soft heart," $\alpha = 0.80$, CI [0.768, 0.829], $\Omega = 0.80$, CI [0.766, 0.83]), conscientiousness (e.g., "Is dependable, steady," $\alpha = 0.88$, CI [0.857, 0.895], $\Omega = 0.88$, CI [0.863, 0.898]), negative emotionality (e.g., "Is moody, has up and down mood swings," $\alpha = 0.92$, CI [0.913, 0.935], $\Omega = 0.93$, CI [0.914, 0.937]), and open-mindedness (e.g., "Is curious about many different things," $\alpha = 0.87$, CI [0.848, 0.886], $\Omega = 0.87$, CI [0.848, 0.888]). All items were measured on a 5-point Likert scale (1 = "Disagree strongly" to 5 = "Agree strongly"). Additionally, each of these five subscales are composed of three additional facets; however, these were not explored in our analyses.

Data Analyses

Data and syntax for all analyses are available on the Open Science Framework: https://osf.io/5hegp/. The data were analyzed



Results

We preregistered our key analyses of the associations between charisma and sexual desire and satisfaction, including controlling for the Big Five (https://osf.io/5hegp/). First, we tested whether people higher in charisma (and those who perceive their partner as more charismatic) report higher sexual satisfaction and desire. Indeed, higher charisma was associated with greater sexual satisfaction, b = 0.048, SE = 0.016, t = 3.00, p < 0.01, CI [0.016, 0.079], and sexual desire, b = 0.045, SE = 0.013, t = 3.46, p < 0.001, CI [0.019, 0.071]. In addition, after accounting for a person's reports of their own charisma, the extent to which they perceive their partner as charismatic was associated with greater sexual satisfaction, b = 0.082, SE = 0.014, t = 5.75, p < 0.001, CI



[0.054, 0.110] and sexual desire, b = 0.054, SE = 0.012, t = 4.69, p < 0.001, CI [0.031, 0.077].

We also explored whether one of the reasons charismatic people had more satisfying sex lives and greater desire was that they are more sexually communal. We found that higher charisma was associated with greater sexual communal strength, b = 0.037, SE = 0.008, t = 4.44, p < 0.001, CI [0.021, 0.053], and this association remained significant after accounting for general communal strength. That is in a model controlling for general communal strength, which was significantly associated with charisma (b = 0.043, SE = 0.016, t = 2.61, p < 0.01, CI [0.011, 0.075]), charisma remained significantly associated with higher sexual communal strength, b = 0.027, SE = 0.008, t=3.62, p<0.001, CI [0.012, 0.042]. Lastly, in an exploratory manner, we tested whether there was a significant indirect effect from charisma to sexual satisfaction and desire through higher sexual communal strength. We found a significant indirect effect of being charismatic on sexual satisfaction through being more communal during sex, b = 0.02, SE = 0.01, z = 3.16, p = 0.002, 95% CI [0.011, 0.041], as well as a significant indirect effect of being charismatic on sexual desire through being more communal during sex, b=0.03, SE=0.01, z=3.78, p<0.001, 95% CI [0.017, 0.050].

Distinguishing Charisma from Extraversion and Ruling out Alternative Explanations

First, given that past research has suggested there may be associations between individual differences (e.g., Big Five) and sexuality outcomes (e.g., Allen & Desille, 2007; Costa et al., 1992), we conducted conservative models that included all covariates (e.g., Big Five, attachment, narcissism) and charisma simultaneously predicting sexual satisfaction, desire, and sexual communal strength. In these models, there was no significant association between charisma and any of the sexuality outcomes (see Supplement for details). To better understand which factors reduced the associations between charisma and our sexuality outcomes, we conducted more nuanced regression models with charisma and each covariate independently predicting our sexuality outcomes (see Supplement for details). In these separate models, the association between charisma and sexual satisfaction and desire remained significant except when controlling for extraversion (in which both charisma and extraversion were nonsignificant). When predicting sexual communal strength, the effect of charisma remained significant in all of these separate models. Taken together, this suggests there may be some shared variance between charisma and extraversion when predicting sexual satisfaction and desire, however it seems charisma was a unique predictor of sexual communal strength.

Given that charisma and extraversion were highly correlated (r(411) = 0.69), and when entered together, neither charisma nor extraversion was associated with sexual satisfaction and desire, we conducted additional tests of whether charisma was,

in fact, distinct from extraversion (see Supplement for details; Wang & Eastwick, 2020). Using confirmatory factor analyses (CFA), we found that charisma and extraversion loaded onto distinct factors. That is, the CFA models with charisma and extraversion loaded on separate factors fit significantly better than the models with each construct loaded on the same factor, which suggests these are distinct constructs. After identifying that charisma and extraversion were distinct constructs, we conducted incremental validity tests predicting sexual satisfaction, desire, and sexual communal strength using structural equation modeling, which suggest charisma had a unique positive association with sexual communal strength, above and beyond extraversion (see Supplement for details).

Although not part of our pre-registration, we also tested whether charisma remained significantly associated with sexual desire and satisfaction after accounting for their comfort with closeness and independence in relationships (i.e., their attachment anxiety and avoidance; tested in separate models) and narcissism. It is possible that charismatic people are lower in both attachment anxiety (r(411) = -0.12, p < 0.05) and avoidance (r(411) = -0.26, p < 0.01) and secure attachment (i.e., lower anxiety and avoidance) is associated with sexual satisfaction and desire. The associations between charisma and sexual desire and satisfaction held while controlling for attachment anxiety and avoidance (with one exception for avoidance), and narcissism (see Supplement for details).

Study 2

Study 1 provided initial evidence for an association between a person's own charisma and their perceptions of partner's charisma and sexual satisfaction and desire. In addition, in Study 1, charismatic people reported higher sexual communal strength, above and beyond general communal strength in their relationship. Largely, these associations remained significant after accounting for other individual difference variables (Big Five personality traits, narcissism, attachment). However, although charisma was identified to be distinct from extraversion, when both extraversion and charisma were entered together as predictors of sexual satisfaction and desire, neither were significantly associated. In Study 2-a 21-day dyadic daily experience study—we aimed to replicate our findings that charisma and perceptions of a partner's charisma were associated with sexual satisfaction and desire in couples' daily lives, as well as extend our findings by exploring whether one's own charisma was associated with a partner's sexual satisfaction and desire. In addition, we tested whether charisma was associated with

³ These additional tests distinguishing charisma from extraversion were not part of our preregistered analyses but were conducted in response to a reviewer's comment.



Table 3 Means, SDs, and correlations for Study 2 (N = 242)

Variable	М	SD	1	2	3	4	5
1. Age	32.63	10.17					
2. Relationship duration (in years)	8.45	8.38	.76**				
3. Charisma	3.93	.73	.01	01			
4. Daily sexual satisfaction	5.54	1.68	.09**	.06**	.12**		
5. Daily sexual desire	4.80	1.82	.06**	.04**	.08**	.44**	
6. Sexual communal strength	5.7	1.24	01	00	.14**	.17**	.25**

*p < .05. **p < .01. Variable 3 was measured from 1 to 5, and variables 4-6 were measured from 1 to 7

greater sexual communal strength and whether the associations between charisma and sexual satisfaction and desire were mediated by sexual communal strength.

Method

Participants and Procedure

Participants were recruited using online (e.g., Facebook, Reddit, Craigslist, Twitter, Kijiji) and physical advertisements (i.e., flyers). To be eligible for the study, participants had to be at least 18 years of age, living together, in a relationship for at least 2 years, currently sexually active in their relationship, living in Canada or the U.S., able to read and understand English, and have daily access to a computer with Internet. Couples interested in participating in the study were sent a pre-screening survey via email to ensure they met the eligibility criteria. We then followed up with both partners over the phone. The telephone screening confirmed the eligibility criteria, and asked questions (e.g., when they met, each other's birthdays) to confirm their couple status and authentic responding. Once eligible for participation in the study, participants were emailed a link to the background survey hosted on Qualtrics. Completion of the background survey by both members initiated the start of the 21 day daily experience study. Participants were compensated up to \$60 CAD (\$48 USD) for their participation in the study. Our final sample included 121 couples (see Table 1 for more detailed demographic information).

Measures

Given the dyadic nature of the data, self-reports and partner reports were available for each measure. Similar to our first study, in addition to our measures of interest, both partners reported on other demographic characteristics such as their age, gender, relationship duration, relationship status, ethnicity, and sexual orientation. For the daily measures, we used shortened scales to measure our constructs of interest to minimize participant attrition (Bolger et al., 2003). See Table 3 for correlations, means, and SD of our main demographics and measures of interest. Since we utilized previously collected data from a

larger study, we did not have additional individual difference measures (e.g., Big Five Personality, narcissism) in Study 2 to test as covariates.

Charisma

Charisma was measured using the same scale as Study 1 and only at background (GCI; Tskhay et al., 2018). We had both self-reports of charisma (α =0.83, CI [0.818, 0.836], Ω =0.82, CI [0.812, 0.832]), as well as perceptions of partners charisma (α =0.81, CI [0.797, 0.818], Ω =0.79, CI [0.780, 0.807]).

Daily-Level Measures

Sexual Satisfaction

Sexual satisfaction was measured using the same scale as Study 1 (GMSEX; Lawrance & Byers, 1998), but it was adapted to be about that day (Ω =0.99, CI [0.984, 0.987]).

Sexual Desire

Sexual desire was measured with one item on a 7-point Likert scale (1=Strongly disagree to 7=Strongly agree). The item was "Today, I felt a great deal of sexual desire for my partner."

Sexual Communal Strength

Sexual communal strength was only measured on sex days using a 3-item measure about a person's communal motivation to meet a partner's needs during sex. Items were rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree) and included: "During sex, I was focused on meeting my partner's needs" (Ω =0.81, CI [0.776, 0.834]).

Data Analysis

The data from Study 2 were part of a larger 21-day dyadic daily diary study (https://osf.io/5hegp/). We used reports of charisma at background to predict sexuality outcomes at the daily level (i.e., daily reports of sexual satisfaction and desire across the 21 days). The data were analyzed using R, using the same



packages from Study 1 to clean the data and calculate means, SD, and scale reliability coefficients. We tested our key predictions using multilevel modeling guided by the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006) in R using the lme4 package (Bates et al., 2018). We aimed to assess whether a person's own and their partner's charisma were associated with daily sexual satisfaction and desire. We conducted indistinguishable models predicting sexual satisfaction and desire across the 21-day study. We also allowed our effects to vary across person and day and modeled random intercepts. Additionally, we conducted a multilevel APIM mediation model using the Monte Carlo Method for Assessing Mediation to explore whether the associations between charisma and sexual satisfaction and desire were mediated by sexual communal strength (Selig & Preacher, 2008). This model was a 2-1-1 mediation model in which charisma was a Level 2, time-invariant predictor measured at background, while our mediator and outcomes, sexual communal strength, sexual satisfaction, and sexual desire, were assessed daily. For the mediator (i.e., sexual communal strength), which was assessed at the daily level, we included both the aggregate and person-mean-centered variables in our models to partition the within- and between-person variance. Although we report both the within-person and between-person indirect effects, since charisma is a between-person predictor, we focused on testing the indirect effects via the between-person aggregated mediator (Zhang et al., 2009). For all of the analyses, we report the unstandardized coefficients (b) which can be interpreted as the change in outcome for every one-unit change in the predictor. Our predictors were mean-centered, and our outcomes of interest were averaged across items for easier interpretability. Similar to our previous study, although we did not have predictions about the role of gender in our findings, past research suggests women may more likely be perceived as charismatic than men (Bem, 1981; Carli, 1999; Carlson, 1971; Costrich et al., 1975; Eagly & Karau, 2002; Keating, 2011). As such, we tested whether any effects were moderated by gender in an exploratory manner, but there was no consistent pattern of gender differences and most of the effects were consistent for men and women (see Supplement for details).

Results

First, we aimed to replicate the findings from Study 1 and tested whether charisma was associated with higher sexual desire and satisfaction in daily life. We found that people higher in charisma reported greater sexual satisfaction, b = 0.044, SE = 0.02, t = 2.23, p < 0.05, CI [0.006, 0.083]; however, the association

between charisma and sexual desire did not reach significance, b=0.028, SE=0.017, t=1.64, p=0.102, CI [-0.005, 0.061]. In Study 2, we were able to test partner effects; however, there were no significant associations between having a charismatic partner and sexual satisfaction, b=0.019, SE=0.02, t=0.94, p=0.351, CI [-0.020, 0.058], or sexual desire, b=0.017, SE=0.017, t=0.98, p=0.329, CI [-0.017, 0.050].

Next, we explored whether there was an indirect effect of being charismatic on both partners' sexual satisfaction through higher sexual communal strength. In other words, we tested the role of sexual communal strength as a mediator of the associations between a person's charisma and both partners' sexual quality. First, we found that people higher in charisma reported being more communal during sex over the course of the 21-day study, b = 0.043, SE = 0.014, t = 3.16, p < 0.01, CI [0.017, 0.070]; charisma was not associated with a partner's sexual communal strength, b = 0.021, SE = 0.014, t = 1.52, p = 0.129, CI[-0.006, 0.048]. In our model, we included the betweenperson (i.e., aggregate) and within-person (e.g., group mean centered) mediator, sexual communal strength (see Table 4), but we summarize the indirect effects through the aggregated mediator below given that our predictor is a between-person trait-level variable. The results revealed a significant indirect effect of being charismatic on higher daily sexual satisfaction and desire for both partners through the charismatic person being more communal during sex across the 21-day study. That is, people higher in charisma tended to be more motivated to meet their partner's needs during sex over the course of the 3-week study and, this was associated with both they and their reported higher daily sexual satisfaction and sexual desire.⁵

Finally, we also tested whether perceiving a partner as charismatic was associated with an individual's own sexual desire and satisfaction in daily life. We found that people who perceived their partner as charismatic reported greater sexual desire, b = 0.056, SE = 0.02, t = 3.08, p < 0.01, CI [0.020, 0.092]; however, there was no significant association with sexual satisfaction, b = 0.034, SE = 0.02, t = 1.83, p = 0.069, CI[-0.002, 0.072]. We also ran mediation models to explore whether having a charismatic partner was indirectly associated with a person's own sexual satisfaction and desire through perceiving their partner as charismatic. First, we found that a partner's self-reported charisma was significantly associated with being perceived as charismatic, b = 0.090, SE = 0.006, t = 14.48, p < 0.001, CI [0.078, 0.102], suggesting that perceptions of a partner's charisma tend to be in line with the partner's self-report. The results also revealed a significant indirect effect of perceiving one's partner as charismatic on their own sexual desire, b = 0.005, CI [0.002, 0.008]; however, there

⁵ In Study 2, we also ran all of our analyses with "Day" included as a fixed effect; however, the pattern of effects was the same. We also conducted lagged analyses in which we control for outcomes on the previous day, and all of the effects remained consistent.



⁴ Given concerns about confounding within and between-person estimates in a 2-1-1 mediation models (Zhang et al., 2009), we also tested a 2-2-2 model with charisma assessed at background, and sexual communal strength and each outcome aggregated over the course of the diary. The results are the same in the 2-2-2 model as in the 2-1-1 model.

Table 4 Indirect associations between charisma and sexual satisfaction and desire through sexual communal strength

Effects	Actor's sexual communal strength	Actor's sexual satisfaction	Actor's sexual desire	Partner's sexual communal strength	Partner's sexual satisfac- tion	Partner's sexual desire		
Charisma (effects mediated	l by actor's sexual o	communal stren	gth aggregate; betweer	n person mediator)				
Total effect	.043** (.01)	.044* (.02)	.028 (.02)	.022 (.01)	.019** (.02)	.017 (.02)		
Direct effect	_	.014 (.02)	.033** (.01)	_	011 (.02)	.001 (.01)		
Indirect effect	-	.003 [.001, .007]	.005 [.002, .008]	-	.004 [.001, .007]	.002 [.001, .004]		
Charisma (effects mediated by actor's sexual communal strength person mean centered; within-person mediator)								
Total effect	.043** (.01)	.044* (.02)	.028 (.02)	.022 (.01)	.019** (.02)	.017 (.02)		
Direct effect	_	.014 (.02)	.033** (.01)	_	011 (.02)	.001 (.01)		
Indirect effect	_	.001 [.0002, .002]	.002 [.001, .004]	-	.0004 [0003, .001]	.002 [.0004, .003]		

^{*} p < .05. ** p < .01. Numbers outside parentheses are unstandardized coefficients; numbers inside parentheses are standard errors; numbers inside brackets are the upper and lower limits of 95% confidence intervals. Since dyads are indistinguishable in these analyses, actor and partner effects are tested in the same model; therefore, the total and direct effects are the same for the actor and partner mediation model

was no significant indirect effect of perceiving one's partner as charismatic on their own sexual satisfaction, b = 0.003, CI [-0.0002, 0.007].

Discussion

The current findings shed light on how being charismatic is associated with sexual desire and satisfaction in romantic relationships, which are key components of maintaining overall romantic relationship quality (Butzer & Campbell, 2008; Impett et al., 2008). Past research has found that charismatic people tend to be more communally oriented (Bass, 1985; Pillai et al., 2003) and passionate in workplace contexts (Ho & Astakhova, 2020), allowing for greater job and life satisfaction for both themselves (Nassif et al., 2021) and their colleagues (Erez et al., 2008; Shamir et al., 1993; Vlachos et al., 2013). However, the current set of studies are the first to our knowledge to investigate the romantic relationships of charismatic people, which are more interdependent than the relationship between charismatic people and their colleagues. By understanding the individual differences associated with people reporting higher sexual desire and more satisfying sex lives, we hope to add to the literature on maintaining sexual quality for both partners in romantic relationships.

Across both studies, charismatic people reported higher sexual satisfaction and desire. In line with past research suggesting that charisma is associated with extraversion (Tskhay et al., 2018), charisma and extraversion were highly correlated in Study 1. In fact, although we provide evidence in Study 1 that charisma is distinct from extraversion, when entered as simultaneous predictors, neither charisma nor extraversion is significantly associated with sexual satisfaction or desire. That is, in the models when charisma and extraversion were entered

as simultaneous predictors, neither were significantly associated with sexual satisfaction and desire. Some past research has found an association between extraversion and sexual satisfaction (Allen & Desille, 2017), as well as with greater frequency of sex (Kurpisz et al., 2016). Additionally, since charisma and extraversion both assess positivity and social adaptability, it is not entirely surprising that charisma and extraversion had shared variance when predicting sexual satisfaction and desire. In future work, it will be important to conduct additional tests to better understand if and how charisma and extraversion uniquely influence sexuality in relationships.

Given that charismatic people have been described as more communally oriented in a workplace setting through their emphasis on a collective identity (House & Howell, 1992; Shamir et al., 1993) and focus on other people's needs (Bass, 1985; Pillai et al., 2003), we suspected that charismatic people would be more communal in their romantic relationships, as well. More specifically, charismatic people are often viewed as passionate (Ho & Astakhova, 2020) and desirable (Flegr et al., 2019), so we believed that charismatic people might be particularly likely to be high in sexual communal strength in their relationships. Additionally, past research has found that people higher in sexual communal strength experience greater sexual satisfaction and desire in romantic relationships (Burke & Young, 2012; Muise & Impett, 2015; Muise et al., 2013). In the current studies, we found that charisma was associated with greater general and sexual communal strength in romantic relationships, and this association with higher sexual communal strength was true above and beyond general communal strength and extraversion (which was not significantly associated with sexual communal strength). This supports the idea that being communally motivated to meet a partner's sexual needs may be a unique pathway through which charismatic people experience greater sexual desire and satisfaction above and beyond



the influence of trait extraversion. That is, although the association between charisma and sexual satisfaction and desire were not significant when controlling for extraversion in Study 1, charisma was uniquely associated with sexual communal strength, which was indirectly linked to higher sexual desire and satisfaction in Study 2.

Additionally, although we did not find that being charismatic directly impacted a partner's sexual satisfaction and desire, we found that through being more communal during sex, partners of charismatic people also reported higher sexual satisfaction and desire. That is, one of the reasons charismatic people and their partner report greater sexual desire and satisfaction is through being more communal during sex, which is consistent with past research on sexual communal strength (Muise & Impett, 2015; Muise et al., 2013). In addition, given that perceptions of a partner's charisma were strongly associated with sexual desire and satisfaction in Study 1, we tested whether a person's charisma in Study 2 was indirectly associated with their partner's sexual desire and satisfaction through perceptions of their partner's charisma. In fact, perceptions of a partner's charisma are another mechanism through which charisma is associated with a partner's higher desire (albeit not sexual satisfaction). Additional research needs to be done to explore other ways in which charismatic people may behave that can indirectly impact their partner's sexual quality.

One of the reasons why charismatic people are more communal during sex may be due to their perspective-taking ability. For instance, past research suggests charismatic people possess greater empathy and a more individualized consideration for their colleagues (Bass, 1985). Charismatic people have been found to display frequent support for their colleagues' efforts (Avolio & Bass, 1985) and are concerned with their colleagues' feelings and needs (Pillai et al., 2003; Podsakoff et al., 1990). Given that charismatic people focus on a collective identity (House & Howell, 1992; Shamir et al., 1993) and the concerns of others (Podsakoff et al., 1990), charismatic people may feel rewarded through other people's fulfillment and this may explain charismatic people's motivation to satisfy their partner's sexual needs in their romantic relationships.

It is also important to note that our effect sizes varied from medium to large in Study 1, and small to very small in Study 2 following the effect size benchmarks in Funder and Ozer (2019). In Study 1, we had medium-sized effects between charisma and sexual satisfaction, desire, and sexual communal strength (r(411) = 0.21 - 0.22). When looking at the effects of perceived partner charisma on these outcomes, we saw larger effects (r(411) = 0.27 - 0.32). In Study 2, we found small effect sizes between actor's charisma and daily sexual satisfaction (r(4361) = 0.12), desire (r(4488) = 0.08), and sexual communal strength (r(4361) = 0.08 - 0.14), very small effect sizes between partner's charisma and these outcomes (r(1101) = 0.14), and very small to small effect sizes between perceived partner's charisma and sexual satisfaction

(r(4340)=0.16), desire (r(4340)=0.15), and sexual communal strength (r(1098) = 0.06). Our largest effects, particularly in Study 1, were between perceptions of a partner's charisma and sexual satisfaction and desire, which suggests it may be more important to view one's partner as charismatic, compared to simply having a charismatic partner although it is important to note that this larger effect may be also due to a person's own biases or shared method variance. However, there is a very large effect between a partner's charisma and perceptions of a partner's charisma (r(411) = 0.54), which suggests people's perceptions of their partner's charisma are consistent with their partner's own reports. Although additional research needs to be done to determine the precise magnitude of the effect charisma can have on sexual quality, the current study provides initial evidence for the role of charisma is sexual desire and satisfaction in relationships.

Limitations and Future Directions

Although the current work provides preliminary evidence that charismatic people and their partners may experience more satisfying sexual lives in their romantic relationships, and that this is at least partially due to charismatic people being more communal during sex, there were limitations to the current research. Although in Study 1 we found that perceiving a partner as charismatic was associated with sexual desire and satisfaction, when testing the effect of perceiving a partner as charismatic in Study 2, we found an effect for sexual desire but not sexual satisfaction. However, we did find an indirect association between a person's charisma and their partner's sexual desire and satisfaction, through a charismatic person's motivation to meet their partner's needs (i.e., sexual communal strength) that were not dependent on a partner's perceptions of their charisma. Future work could explore other possible pathways for the association between charisma and both partner's sexual well-being, such as more effective and open communication (Jiang et al., 2018; Zhou & Long, 2012).

Although our studies include replicated results to bolster support for the association between charisma and sexual satisfaction and desire, the results were correlational and cannot confirm the causal direction of the association. In Study 2, although we assessed sexual communal strength, desire, and satisfaction over time, we cannot provide definitive evidence of the causal direction between charisma and our mediator, sexual communal strength. It is possible that people who develop greater responsiveness during sex begin to consider themselves as more charismatic; thus, additional studies need to be conducted to clarify this relationship. Given that past research suggests the Big Five personality dimensions, which are correlated with charisma, are fairly stable over time (Roberts & DelVecchio, 2000; Specht et al., 2011; Vaidya et al., 2002), it is likely that charisma is a relatively stable trait. Therefore, we suspect a person's charisma likely precedes their sexual

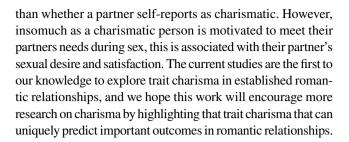


quality and sexual motivations in a particular relationship. Past research investigating charisma, however, suggests it is possible to increase charisma in leaders through training (Antonakis et al., 2011) and, although the conceptualization of charisma differs in workplace contexts, it may be possible to manipulate the charisma of people in romantic relationships to test whether increases in charisma have consequences for sexual satisfaction, desire, and sexual communal strength.

Charisma has been found to be a desirable quality when seeking a short-term partner (Flegr et al., 2019), and in the current research, we also demonstrated that it was associated with sexual communal strength and higher desire and sexual satisfaction in established relationships. However, it remains unclear how charisma influences the development of relationships and the maintenance of sexual desire and satisfaction over time. Future research could recruit new couples and follow them over time in their relationship to test how charisma is associated with sexual quality early on in relationships and if charismatic people and their partners are more likely to maintain desire and satisfaction over time. In addition, a longitudinal design would allow the exploration of other mechanisms that might account for why charismatic people may have more satisfying sex lives, such as whether they are more skilled communicators about sexual topics. Lastly, it would be interesting to explore whether couples who match in charisma differ in their sexual quality from couples who are mismatched (e.g., one partner is higher in charisma and the other is low). An ideal method to test this would be the use of response surface analysis (Barranti et al., 2017), a technique that tests for congruence effects above and beyond the effects of two individual predictors, which requires a very large sample size to sufficiently power the models. In future work, it may be fruitful to compile multiple studies to test this question of whether matching on charisma is important for sexual quality.

Conclusion

The results of the current set of studies extend past research on charisma by providing preliminary evidence that trait charisma is associated with sexual quality in romantic relationships. Extensive research on charisma in workplace contexts has found many benefits for charismatic people and their colleagues (Balkundi et al., 2011; Bass, 1985; Erez et al., 2008; Hepworth & Towler, 2004; Nohe et al., 2013; Paulsen et al., 2009; Shamir et al., 1993; Vlachos et al., 2013); however, to our knowledge, only one other study has documented the closest relationships of charismatic people. Our results suggest that charisma is associated with greater sexual satisfaction and desire in romantic relationships, and this was, due to charismatic people being more communal in their sexual relationship. Although past research shows significant benefits for colleagues of charismatic people (e.g., Balkundi et al., 2011; Bass, 1985), our findings suggest that in romantic relationships it may be more important to perceive one's partner as charismatic rather



Author Contributions All authors contributed to the study conception and design. Material preparation and data collection were performed by Stephanie Raposo and Amy Muise, while the data analyses were performed by Eric Tu. The first draft of the manuscript was written by Eric Tu and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding This work has been supported by a Social Science and Humanities Research Council of Canada (SSHRC) graduate scholarship awarded to Eric Tu and Stephanie Raposo and SSHRC Insight Grants awarded to Amy Muise.

Declarations

Conflicts of interest The authors declare that they have no conflict of interest.

Ethics Approval Ethics approval was granted by the Human Participants Review Committee of York University.

Informed Consent Informed consent to participate and publish was obtained from all individual participants included in the studies.

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