






Artículo

## Exploring the Relationships Between Sexual Arousal and Subjective Orgasm Experience on Masturbation in LGB Young Adults

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### ABSTRACT

**Background/Objective:** Current evidence on the Multidimensional Model of the Subjective Orgasm Experience in the context of solitary masturbation is limited to heterosexual samples. This study explores the model's validity in LGB individuals by analyzing the relationship between its dimensions (affective, sensory, intimacy, and rewards) and different sexual arousal measures. **Method:** Seventy-six LGB young adults (38 men, 38 women; aged 18–32) participated in a lab task involving content-neutral and sexually explicit films showing same-sex actors engaged in self-exploration and solitary masturbation. The assessment included subjective orgasm experience (SOE), propensity for sexual excitation, ratings of sexual arousal (RSA) and genital sensations (RGS), and genital response (penile circumference or vaginal pulse amplitude). Regression analyses explored the links between sexual arousal measures and the SOE dimensions. **Results:** In men, genital response was key: it positively explained affective ( $\beta = .34$ ) and rewards ( $\beta = .36$ ) dimensions. In women, subjective sexual arousal was more influential: the RSA positively explained sensory ( $\beta = .34$ ) and intimacy ( $\beta = .66$ ) dimensions, while the RGS negatively explained intimacy ( $\beta = -.43$ ). **Conclusions:** Findings support the model's validity in LGB populations, revealing gender-specific patterns.

## Explorando las Relaciones Entre la Excitación Sexual y la Experiencia Subjetiva del Orgasmo en la Masturbación en Adultos Jóvenes LGB

### RESUMEN

**Antecedentes/Objetivo:** La evidencia actual sobre el Modelo Multidimensional de la Experiencia Subjetiva del Orgasmo en el contexto de la masturbación en solitario se limita a muestras heterosexuales. Este estudio explora la validez del modelo en personas LGB mediante el análisis de la relación entre sus dimensiones (afectiva, sensorial, intimidad y recompensa) y diferentes medidas de excitación sexual. **Método:** Setenta y seis jóvenes adultos LGB (38 hombres, 38 mujeres; de edades comprendidas entre 18 y 32 años) participaron en una tarea de laboratorio que incluía películas neutras y sexualmente explícitas, con actores de su mismo sexo, que mostraban conductas de autoexploración y masturbación en solitario. La evaluación incluyó la experiencia subjetiva del orgasmo (ESO), propensión a la excitación sexual, valoraciones de la excitación sexual (VES) y de las sensaciones genitales (VSG), y la respuesta genital (circunferencia del pene o amplitud del pulso vaginal). Se realizaron análisis de regresión para explorar los vínculos entre las medidas de excitación sexual y las dimensiones de la ESO. **Resultados:** En hombres, la respuesta genital fue clave: explicó positivamente las dimensiones afectiva ( $\beta = .34$ ) y recompensa ( $\beta = .36$ ). En mujeres, la excitación sexual subjetiva fue más influyente: la VES explicó positivamente las dimensiones sensorial ( $\beta = .34$ ) e intimidad ( $\beta = .66$ ), mientras que la VSG explicó negativamente la dimensión intimidad ( $\beta = -.43$ ). **Conclusiones:** Los resultados respaldan la validez del modelo en poblaciones LGB, revelando patrones específicos por género.

#### Palabras clave:

Experiencia subjetiva del orgasmo

Excitación sexual

Respuesta genital

Masturbación

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## Introduction

Orgasm is recognized as a marker of sexual health and pleasure (Kontula & Miettinen, 2016) and can be conceptualized from a physiological point of view (e.g., rhythmic contractions in the perineal region, along with changes in the cardiovascular and respiratory systems, and the alleviation of sexual tension; Schiavi & Segraves, 1995), psychologically because of its association with emotional reactions (Arcos-Romero & Sierra, 2018; Lorentzen, 2007) and socioculturally because of its socially embedded meaning (Frith, 2015). In this work, we focus on the subjective orgasm experience (SOE, hereafter), which refers to its perception/valuation at an exclusively psychological level (Arcos-Romero & Sierra, 2018; Mah & Binik, 2001). The study of SOE has made it possible to examine people's appraisal of this phenomenon beyond conceiving it merely in terms of frequency or duration (Mangas et al., 2025a).

In addition, orgasm represents a psychosexual phenomenon that is closely linked to mental health. Disorders of anxiety, depression, or stress negatively affect the orgasmic experience (Abedi et al., 2015; Lorenz & Meston, 2014; McCool-Myers et al., 2018). Therefore, it is important to conceive of mental health and sexual health in an interrelated way. Regarding SOE, recent studies have shown its association with sexual health and couple well-being, linking this experience to both sexual (e.g., sexual satisfaction; Arcos-Romero & Sierra, 2020; Mangas et al., 2024b) and nonsexual (e.g., relationship satisfaction; Mangas et al., 2025b) interpersonal factors. SOE has also shown differences according to sociodemographic factors such as gender, with women generally valuing their orgasms more intensely than men in both heterosexual (Arcos-Romero & Sierra, 2020; Mah & Binik, 2002) and LGB populations (Mangas et al., 2022; Muñoz-García et al., 2023; Sierra et al., 2024b). Regarding sexual orientation, in general terms, heterosexual people tend to value their orgasms more intensely than gay people (Muñoz-García et al., 2023).

In recent years, some approaches to the study of SOE in sexually diverse populations have been observed (Mangas et al., 2022, 2025a; Pérez-Amorós et al., 2024; Sánchez-Pérez et al., 2025; Sierra et al., 2024b); however, despite this, research on groups that deviate from the traditional heterosexual script remains scarce. Therefore, this study focuses its attention on these collectives, since there is evidence that SOE presents differential nuances depending on sexual orientation (e.g., Pérez-Amorós et al., 2024; Sierra et al., 2024b).

SOE can be expressed in two different contexts (i.e., couple sexual relationships and solitary masturbation), which differ from each other (Mah & Binik, 2001, 2002). It is known that orgasmic experience is more intense in the context of sexual relationships than in that of solitary masturbation (Muñoz-García et al., 2023; Sierra et al., 2021), with self-reported negative experiences of orgasm being observed in the latter context (Mangas et al., 2024a). Additionally, a recent dyadic study has shown the existence of a certain transference between SOE experienced in the context of masturbation and that of sexual relationships, both in mixed- and same-sex couples (Pérez-Amorós et al., 2024), which means that the intensity with which the partners experience their orgasms during solitary masturbation influences SOE during couple sexual relationships. All of the above justifies the need for valid theoretical models to study SOE that take into account both the context in which the orgasm occurs and the sexual orientation of the person

experiencing it.

The Multidimensional Model of the Subjective Orgasm Experience (MMSOE; Mah & Binik, 2001) conceptualizes SOE in sensory, evaluative, and affective terms. In its validation in the Spanish population (Arcos-Romero et al., 2019), four dimensions were proposed: affective (i.e., emotions experienced during orgasm), sensory (i.e., perception of physiological sensations), intimacy (i.e., aspects related to intimacy or closeness), and rewards (i.e., consequences derived from orgasm).

Additionally, sexual arousal is described as an emotional or motivational state that can be initiated by internal and/or external stimuli, with both physiological and psychological manifestations (Bancroft & Janssen, 2000; Janssen, 2011). We consider that certain constructs of sexuality (e.g., SOE) are susceptible to receiving validity evidence by relating them to psychophysiological measures—the genital response exemplifies this particularly well (Álvarez-Muelas & Sierra, 2023; Korff & Geer, 1983). In this line, the procedure will consist of relating the dimensions of MMSOE with different measures of sexual arousal (propensity for sexual excitation, rating of sexual arousal, rating of genital sensations, and genital response), a task that has already been performed for the context of heterosexual relationships (Arcos-Romero et al., 2019), in same-sex relationships (Mangas et al., 2024c), and for the context of solitary masturbation, although only in heterosexual individuals (Cervilla et al., 2024). In the latter scenario, the results indicated that, in men, propensity for sexual excitation and rating of sexual arousal were associated with different dimensions of the subjective orgasmic experience, whereas, in women, the rating of sexual arousal and the rating of genital sensations were associated only with the sensory dimension (Cervilla et al., 2024).

To date, there is no evidence of MMSOE in the context of masturbation in LGB individuals, which justifies the need for the present study. Further study of SOE is a priority for the development of effective treatments and sexual health promotion plans. This study expands the proposal of Cervilla et al. (2024) to LGB individuals. For this purpose, the primary goal will be to analyze the explanatory capacity that the propensity for sexual excitation, subjective sexual arousal, and genital response experienced when viewing videos with people of the same sex masturbating have on the four dimensions of the MMSOE (i.e., affective, sensory, intimacy, and rewards). In line with previous results obtained in the context of heterosexual (Arcos-Romero et al., 2019) and same-sex (Mangas et al., 2024c) relationships and in the context of solitary masturbation in heterosexual individuals (Cervilla et al., 2024), it is expected that different measures of sexual arousal will explain part of the variance of SOE dimensions, in this case in the context of masturbation, in LGB individuals.

## Method

### Participants

The study included 76 Spanish LGB young adults: 38 men (32 gays and 6 bisexuals) and 38 women (6 lesbians and 32 bisexuals), ranging in age from 18 (legal age in Spain) to 32 years. The mean ages of men and women were 23.58 ( $SD = 3.48$ ) and 22.05 ( $SD = 2.89$ ), respectively. All reported being cisgender and enrolled in university education. See Table 1. Inclusion criteria included

having had orgasmic experiences through solitary masturbation in the last three months. Individuals were excluded from the study if they experienced medical issues, sexual dysfunctions, or psychological disorders. Participants who took medications that could influence sexual function, or those with a history of drug or alcohol abuse, as well as those who had experienced sexual abuse, were also not included. All of this information was based on self-reported responses obtained through ad hoc questions specifically designed for this study.

## Measures and Materials

**Sociodemographic and Sexual History Questionnaire.** It gathered data on various factors, including participants' sex, age, educational background, nationality, sexual orientation, masturbation practices, and any medical, psychological, or sexological issues. Additionally, it collected information about pharmacological treatments, substance and alcohol use, and experiences of sexual abuse and victimization.

**Spanish version of the Orgasm Rating Scale (ORS; Mah & Binik, 2020)** validated in the context of masturbation (Cervilla et al., 2022). To assess SOE, this measure used 25 adjectives classified into four distinct factors: Affective, Sensory, Intimacy, and Rewards. The measure utilized a 6-point Likert scale to assess how well each of the 25 adjectives described the most recent orgasmic experience during masturbation, with values ranging from "does not describe it at all" to "describes it perfectly." Higher scores indicated greater SOE. The adaptations for Spanish heterosexual (Cervilla et al., 2022) and LGB (Muñoz-García et al., 2023) collectives revealed good reliability and validity indicators in the masturbation context. In this study, McDonald's omega ranged between .72 (Rewards) and .92 (Sensory).

**Spanish version of the Sexual Inhibition/Excitation Scales-Short Form (SIS/SES-SF; Carpenter et al., 2011)** adapted by Moyano and Sierra (2014). The measure included 14 items divided into

three subscales, designed to evaluate the propensity for sexual excitation and inhibition: Sexual excitation, Sexual inhibition due to threat of performance failure, and Sexual inhibition due to threat of performance consequences (SES, SIS1, and SIS2, respectively). The four-point Likert-type scale used ranged from "strongly agree" to "strongly disagree". For a better interpretation, the scores were inverted, so that higher scores indicate a higher propensity for sexual excitation/inhibition. Good internal consistency was observed, with Cronbach's alpha ranging from .66 to .84 for young people (Sierra et al., 2024a) and it has optimal psychometric properties in the LGB population (Sierra et al., 2025). This study considered only the SES subscale ( $\omega = .69$ ).

**Spanish version of the Rating of Sexual Arousal (RSA; Mosher, 2011)** validated by Sierra et al. (2017). It assessed subjective sexual arousal in reaction to specific stimuli (e.g., sexually explicit content) by means of five items answered on a seven-point Likert-type scale from "none" to "extremely." It presents adequate consistency and validity evidence (Sierra et al., 2017, 2019), consistent with the present study ( $\omega = .91$ ).

**Spanish version of the Rating of Genital Sensations (RGS; Mosher, 2011)** also validated by Sierra et al. (2017). It examined the self-reported genital sensations elicited by sexual stimuli through 11 descriptions from "No genital sensation" to "Multiple orgasms." The scale has shown adequate validity evidence (Sierra et al., 2017, 2019).

**BIOPAC® MP150 polygraph and the AcqKnowledge 5.0** software were used to obtain and process psychophysiological data. To assess genital response, two different devices were employed: a penile plethysmograph and a vaginal photoplethysmograph. The first measured the change in penile circumference during erection (in millimeters) and the second measured the vaginal pulse amplitude (in volts). Genital response was assessed by calculating the difference between scores for the explicit sexual stimulus and the baseline, in line with prior research on this topic (Álvarez-Muelas et al., 2022; Arcos-Romero et al., 2019; Cervilla et al., 2024; Mangas et al., 2024c).

**Table 1**  
*Sociodemographic and Sexual History Characteristics of the Participants*

	Men ( <i>n</i> = 38)		Women ( <i>n</i> = 38)		<i>t</i> / $\chi^2$	<i>d</i> / <i>V</i>
	Range	<i>M</i> ( <i>SD</i> )	Range	<i>M</i> ( <i>SD</i> )		
Age (years)	18-32	23.58 (3.48)	18-30	22.05 (2.89)	2.08*	0.48
	<i>n</i> (%)		<i>n</i> (%)			
Education level					0.35	-
Graduate degree	36 (94.7)		37 (97.4)			
Postgraduate degree	2 (5.3)		1 (2.6)			
	<i>M</i> ( <i>SD</i> )		<i>M</i> ( <i>SD</i> )		1.46	-
Age of first sexual relationship (in years)	17.19 (1.86)		16.51 (2.12)			
	<i>n</i> (%)		<i>n</i> (%)			
Current relationship					1.90	-
Yes	16 (42.1)		22 (57.9)			
No	22 (57.9)		16 (42.1)			
	<i>M<sub>e</sub></i>	<i>M</i> ( <i>SD</i> )	<i>M<sub>e</sub></i>	<i>M</i> ( <i>SD</i> )	2.45*	0.56
Number of lifetime sexual partners	8	28.65 (53.36)	6	7.05 (5.88)		

Notes. *M<sub>e</sub>* = median; *M* = mean; *SD* = standard deviation. \**p* < .05.

Visual stimuli. Nature documentaries served as neutral videos to establish the baseline for the study. As sexual stimuli, videos showing people engaging in masturbatory behaviors, both non-genital (self-exploration) and genital, were presented. The actors/actresses were of the same sex as the participant. All videos were three minutes in length. Prior validation in a lab setting confirmed that the sexual videos effectively induced sexual arousal.

## Procedure

Young adults were invited to participate, on a voluntary basis and without compensation, through university student mailing lists, posters, and posts on social media. Participants were recruited from February 2023 to April 2024. Interested volunteers accessed an online survey that included screening instruments designed to ensure inclusion and exclusion criteria. It comprised an informed consent and the scales presented above. Women were not evaluated during menstruation. To avoid possible sources of variation in physiological response, participants were asked to abstain from caffeine, alcohol, and dyadic or solitary sexual activity in the 24 hours prior to the experiment.

In the experimental task in the laboratory, the participants accepted a second informed consent with the objective of the experiment, guaranteeing anonymity and confidentiality of their data. After explaining to them what their participation entailed and the placement and adjustment of the devices to record the genital response, the responsible researcher left the experimental room. Once the devices had been placed and the signal had been checked for proper functioning, they were left for five minutes of adaptation. Stability of light and temperature conditions was guaranteed. The genital response was recorded while participants viewed two blocks of videos (see Figure 1). The sequences were

counterbalanced across participants to control for a possible effect of stimulus order (Álvarez-Muelas et al., 2022; Cervilla et al., 2024; Mangas et al., 2024c; Sánchez-Pérez et al., 2025). Men watched sexual videos of a man masturbating, and women watched sexual videos of a woman masturbating. At the end of each sexual video, participants answered the subjective sexual arousal assessment instruments. During the laboratory task, participants were not required to masturbate or self-explore. The methodology and procedure used in this study are described in more detail in Álvarez-Muelas et al. (2025).

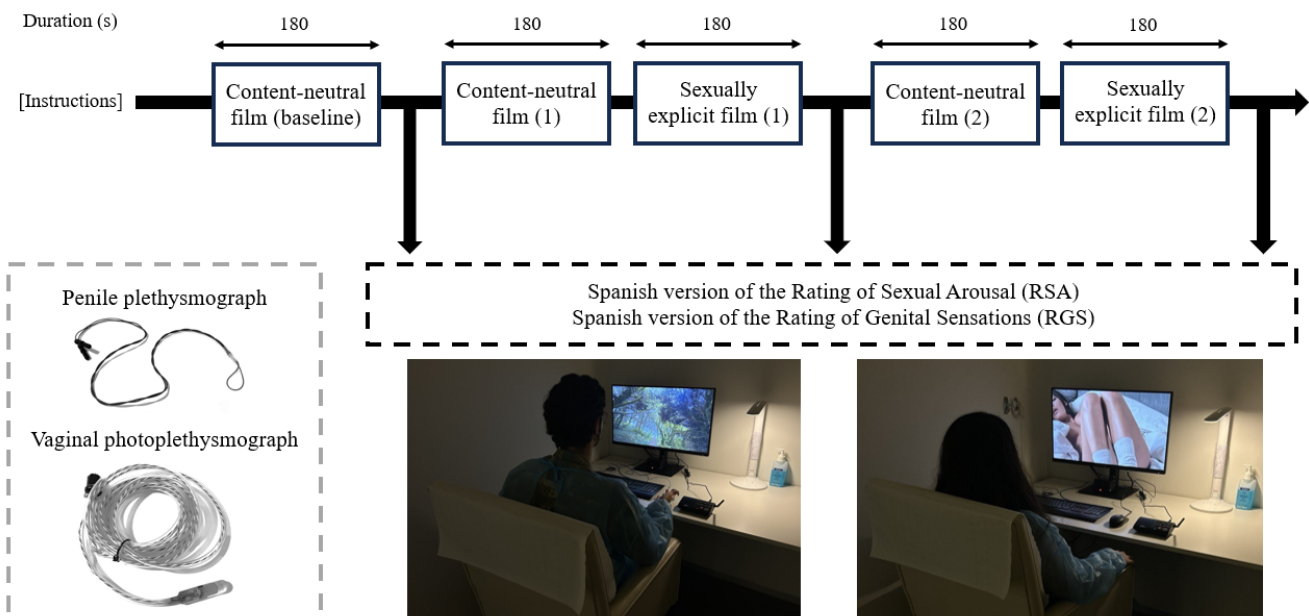
## Data Analysis

The required sample size was estimated using the G\*Power software (Faul et al., 2007) for regression analyses. Based on a power analysis with parameters set at  $\alpha = .05$ , power = 0.80,  $d = 0.45$ , and four predictors, the calculation indicated that a minimum of 32 participants per sex was necessary. To associate the four dimensions of SOE with the sexual arousal measures, Pearson correlations were used. Additionally, stepwise multiple regression models were conducted to separately explain the SOE dimensions based on sexual arousal measures for men and women. Regarding the latter analysis, predictor variables were segmented into: (1) SES and (2) RSA, RGS, and genital response. The staging of these predictor variables is consistent with the theoretical rationale of previous studies of a similar nature (e.g., Mangas et al., 2024c).

## Results

A gender-based comparison was conducted across all study variables, including the ORS dimensions (affective, sensory, intimacy, and rewards) and its global score, as well as the sexual-

**Figure 1**  
Graphical Representation of Experimental Procedure, Participants Placement, and Psychophysiological Devices



**Table 2**  
*Psychosexual Health Variables of the Participants*

	Men ( <i>n</i> = 38)		Women ( <i>n</i> = 38)		<i>t</i>
	Range	<i>M</i> ( <i>SD</i> )	Range	<i>M</i> ( <i>SD</i> )	
ORS dimensions					
Affective	13 – 30	22.76 (4.92)	10 – 30	22.34 (5.11)	0.37
Sensory	2 – 60	25.22 (12.82)	3 – 57	28.30 (14.20)	-0.99
Intimacy	0 – 13	5.39 (3.49)	0 – 15	5.97 (3.46)	-0.73
Rewards	4 – 15	10.95 (2.71)	0 – 15	9.82 (3.25)	1.65
Global score	31 – 115	64.33 (19.52)	19 – 101	66.43 (21.78)	-0.44
Sexual arousal variables					
Propensity for sexual excitation	13 – 23	16.87 (2.26)	10 – 24	15.92 (2.98)	1.56
Rating of sexual arousal	7 – 28.5	19.41 (5.69)	7.5 – 28	17.93 (5.52)	1.15
Rating of genital sensations	2 – 9	3.83 (1.49)	1.5 – 7.5	3.5 (1.26)	1.04
Genital response	3.36 – 40.39	14.91 (8.99)	0 – 0.13	0.04 (0.03)	–

Notes. *M* = mean; *SD* = standard deviation.

**Table 3**  
*Correlations Between the Subjective Orgasm Experience and Sexual Arousal Measures*

Variables	1	2	3	4	5	6	7	8
1. Affective	-	.66***	.37*	.40*	-.04	.24	.11	-.12
2. Sensory	.44**	-	.51**	.48**	.00	.34*	.09	-.02
3. Intimacy	.38*	.64***	-	.37*	-.21	.37*	.02	-.22
4. Rewards	.62***	.30	.47**	-	.06	.13	-.17	-.30
5. Propensity for sexual excitation	.08	.31	.19	.00	-	.30	.06	-.05
6. Rating of sexual arousal	-.05	.02	.03	.13	.23	-	.68***	.22
7. Rating of genital sensations	-.16	-.10	-.07	-.09	.07	.74***	-	.29
8. Genital response	.34*	.28	.09	.36*	-.18	.21	.10	-

Notes. Values below the diagonal illustrate the scores for men, while values above the diagonal the scores for women. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

arousal measures (propensity for sexual excitation, rating of sexual arousal, and rating of genital sensations). Genital response was described but not compared statistically. See Table 2.

### Bivariate Correlations

In men, statistically significant and positive correlations were found between the genital response and the affective ( $r = .34$ ,  $p < .05$ ) and rewards ( $r = .36$ ,  $p < .05$ ) dimensions of the SOE. In women, the rating of sexual arousal was positively associated with the sensory ( $r = .34$ ,  $p < .05$ ) and intimacy ( $r = .37$ ,  $p < .05$ ) dimensions. See Table 3.

### Regression Models

In men, the genital response significantly explained 9% of the variance ( $F_{1,36} = 4.69$ ,  $p < .05$ ) of the affective dimension ( $\beta = .34$ ) and 10% of the variance ( $F_{1,36} = 5.19$ ,  $p < .05$ ) of the rewards dimension ( $\beta = .36$ ) of the SOE. In women, the rating of sexual arousal explained 9% of the variance ( $F_{1,36} = 4.68$ ,  $p < .05$ ) of the sensory dimension ( $\beta = .34$ ). In addition, 19% of the variance ( $F_{1,35} = 5.29$ ,  $p < .05$ ) of the intimacy dimension was significantly and positively explained by

the rating of sexual arousal ( $\beta = .66$ ), and negatively explained by the rating of genital sensations ( $\beta = -.43$ ). See Table 4.

### Discussion

The aim of the present study was to provide validity evidence to the MMSE in the context of solitary masturbation in LGB people, expanding to this population the findings of Cervilla et al. (2024) in heterosexual people. The explanatory capacity of different sexual arousal measures (i.e., propensity for sexual excitation, rating of sexual arousal, rating of genital sensations, and genital response) on the four dimensions of subjective orgasmic experience (i.e., affective, sensory, intimacy, and rewards) was examined. In general terms, we found that, in LGB people, the four dimensions of SOE were related to some of the measures of arousal, although differentially in men and women. Our findings highlight the prominence of different dimensions according to gender, which is congruent with previous studies that emphasize that the subjective orgasmic experience presents differential manifestations according to gender, rather than sexual orientation (Mangas et al., 2022; Muñoz-García et al., 2023; Sierra et al., 2024b). The results obtained in men and women, respectively, are discussed below.



**Table 4**  
Multiple Regression Models for Subjective Orgasm Experience Dimensions

Predictors	<i>B</i>	<i>SE</i>	$\beta$	95% <i>CI</i>	<i>t</i>	<i>p</i>	<i>R</i> <sup>2</sup>	<i>VIF</i>
<b>Men</b>								
Affective							.09	
Genital response	0.19	0.09	.34	0.01, 0.36	2.17	.037		1.00
Rewards							.10	
Genital response	0.11	0.05	.36	0.01, 0.20	2.28	.029		1.00
<b>Women</b>								
Sensory							.09	
Rating of sexual arousal	0.87	0.40	.34	0.05, 1.69	2.16	.037		1.00
Intimacy							.19	
Rating of sexual arousal	0.41	0.13	.66	0.15, 0.67	3.25	.003		1.87
Rating of genital sensations	-1.17	0.55	-.43	-2.29, -0.04	-2.11	.042		1.87

Notes. *B*: non-standardized beta; *SE*: standard error;  $\beta$ : standardized beta; 95% *CI*: 95% confidence interval; *R*<sup>2</sup>: adjusted R-squared value; *VIF*: variance inflation factor. Only statistically significant predictors have been retained in the final models.

In men, only the genital response was significantly associated with SOE. Specifically, the penile circumference was positively related to the affective and rewards dimensions. All previous evidence validating the MMSOE with laboratory measures has pointed to the relevance of objective sexual arousal only for men, regardless of sexual orientation (Arcos-Romero et al., 2019; Cervilla et al., 2024; Mangas et al., 2024c). The studies by Arcos-Romero et al. (2019) and Cervilla et al. (2024) related genital response to the intimacy dimension, whereas, in the present study, it was related to the affective dimension—as in the study by Mangas et al. (2024c), in the validation of the model in same-sex relationships—and to the rewards dimension. The prominence of the genital response in men, in contrast to women, may be due to aspects related to both sexual arousal and orgasmic experience, since in men both dimensions of sexual function tend to be related more to physical than psychological aspects (Granados et al., 2017; Salisbury & Fisher, 2014). Thus, in men, arousal is manifested in a more physically evident way (i.e., penile erection) and also orgasm (which can lead to ejaculation), in contrast to what happens in women, who are more characterized by a tendency to respond sexually in a reflex/automatic and not so visible way (Arcos-Romero et al., 2019). Despite this, women are also aware of the sensations their bodies are experiencing.

Previous evidence has shown that the affective dimension may be masking other dimensions of SOE (Mangas et al., 2024a), especially notable in the case of non-heterosexual men (Mangas et al., 2024b; Pérez-Amorós et al., 2024). In male couples, it has been observed that the affective intensity of SOE in the context of solitary masturbation negatively influences the overall SOE experienced in the context of sexual relationships (Pérez-Amorós et al., 2024), which suggests the compensatory effect that masturbation vs. sexual relationships acquires in them, a typically male pattern and different from that of women, in whom both scenarios tend to be complementary (Cervilla & Sierra, 2022; Rowland et al., 2020a, 2020b; Sierra et al., 2023). On the other hand, the salience of the rewards dimension is partially consistent with previous literature on SOE. This is the only dimension in which more intensity is manifested in the context of masturbation than in the context of sexual relationships (Muñoz-García et al., 2023) and in which

there are no differences in orgasmic intensity when comparing non-heterosexual men and women (Mangas et al., 2022). Future studies should explore why, in the specific case of LGB men, genital arousal is related to these consequences derived from orgasm.

Regarding women, unlike men, only subjective sexual arousal (i.e., rating of sexual arousal and rating of genital sensations) was significantly associated with SOE. Rating of sexual arousal, which was positively related to sensory and intimacy dimensions, was more prominent. The rating of genital sensations explained the intimacy dimension of orgasm, together with the rating of sexual arousal, although in this case negatively. We should note that in this last result, we found moderate problems of collinearity, which constitutes a limitation, so this finding should be interpreted with caution. These associations are in line with the findings of Cervilla et al. (2024) in heterosexual women, in the context of masturbation, where the rating of sexual arousal explained, as in the present study, the sensory dimension of SOE. It is worth noting the notoriety of sexual arousal (non)concordance, typically characteristic of female sexuality (e.g., Suschinsky et al., 2017; Suschinsky & Lalumière, 2012), which could explain why no significant relationship was found in the women in this study with the genital response variable assessed through vaginal photoplethysmography.

The protagonism of subjective sexual arousal in women could be explained both by their ability to better describe their orgasmic sensations (Cervilla et al., 2024; Rowland et al., 2018; Sierra et al., 2021), allowing them to value the subjective aspects more than men (Laan & Janssen, 2007), and by the discursive capacity they have to describe them, since, compared to men, women have a significantly wider range of adjectives with which to value their orgasmic sensations (Arcos-Romero & Sierra, 2020). The enhancement of the sensory dimension in women seems logical, as they, compared to men, subjectively rate their orgasms more intensely in this dimension (Mah & Binik, 2002; Muñoz-García et al., 2023). The salience of the intimacy dimension could be explained by the fact that it is women who are sexually related to other women that are more characterized by manifesting a sexuality based on intimacy (Eldridge & Gilbert, 1990) and emotional closeness (Guzmán-González et al., 2021; Spitalnick

& McNair, 2005), compared to heterosexual people and gay men (Mangas et al., 2022). The progressive destigmatization of female masturbation and the promotion of a more positive view of their sexuality (Kılıç et al., 2024) could be influencing the normalization of descriptors of the intimacy dimension (i.e., “close”, “loving”, or “tender”), by referring to their sexual self-exploration, increasingly conceptualizing it as a form of self-care and self-knowledge (Carvalho & Leal, 2013; Matsick et al., 2016). The negative association between the intimacy dimension and the rating of genital sensations might be related to the lack of specificity of their bodily arousability, as women tend to experience sexual arousal in a very wide range of bodily areas, both genital and non-genital, and also based on a more plural range of cues, including behavioral and cognitive/emotional ones (Graham et al., 2004). It could also be due to specific differences associated with the context of solitary masturbation as women tend, to a greater extent than men, to employ sexual fantasies and erotic toys (Rowland et al., 2020a). The lower frequency of masturbation reported by women compared to men (Herbenick et al., 2023; Sierra et al., 2023) could also be another explanatory factor. All this could be behind this observed discrepancy between their assessment of their general sexual arousal and their genital sensations. This finding should be further explored in the future, as it was also observed in Cervilla et al. (2024), although the association did not reach statistical significance.

There are limitations in this study that affect how the results can be generalized. Among these are the selection of a non-randomized sample and its sociodemographic characteristics, since only young, healthy, university-educated, cisgender individuals participated. On the other hand, given the absence of previous studies of a similar nature in the LGB population, many of the findings have been compared with results found in studies with heterosexual participants, which may not be desirable. In addition, the artificiality of the laboratory studies may have influenced the results, as they prioritize internal validity at the expense of external validity. Future research should explore in greater depth the negative associations with the intimacy dimension in women, and consider the inclusion of older people, clinical samples, and people with other sexual orientations and identities that are even more underrepresented in sexological research. We suggest the incorporation of new sexual stimuli that may more accurately represent the interests of the participants. We also propose the incorporation of other masturbation parameters in addition to orgasmic intensity (e.g., attitudes), the examination of motives leading to masturbation, additional subjective and objective measures of sexual arousal (e.g., thermography or portable plethysmography devices), as well as the presentation of both neutral and sexual stimuli via virtual reality environments.

### Implications and Conclusions

The obtained results are considered clinically relevant, especially for LGBTIQ+ Affirmative Psychotherapy, an approach that is progressively gaining popularity and that draws on scientific knowledge about sexual diversities for use in psychological practice (Burger & Pachankis, 2024; Freeman-Coppadge & Langroudi, 2021), presenting this population with both strengths and specific sources of distress that make it unique (Pachankis et al., 2023). In general terms, given that one of the central axes of this work was the evaluation

of orgasmic intensity in the context of solitary masturbation, our findings could help normalize masturbation behavior by psychotherapy professionals, with the aim of contributing to its conception as a health-promoting practice (Rowland et al., 2020b) and commonly incorporated in sexological interventions (Laan & Rellini, 2011; Riley & Segraves, 2006), even to improve aspects related to the orgasmic experience (Marchand, 2021). Compared to partner sexuality, masturbation has tended to be less studied and even stigmatized, particularly in women (Bačák & Štulhofer, 2011; Das, 2007), so that highlighting this scenario, as well as the orgasms produced in it, would contribute to the positive framing of this behavior. Recently, it has been seen that partner orgasm could also function as an achievement or marker of femininity for women (Chadwick et al., 2024), and that positive attitudes towards female masturbation are associated with greater sexual satisfaction in both partners (Kılıç et al., 2024). Future work could explore whether these effects would also replicate in those who fall outside the heterosexual script.

Given the impossibility of assessing sexual arousal in a therapeutic context, our findings shed light on how this arousal relates to orgasmic experience, offering clues on how to work with LGB people. Although there is some evidence on how these people experience their orgasms in the context of masturbation (Muñoz-García et al., 2023), this study again highlights that certain psychosexual constructs are more dependent on issues associated with gender than on sexual orientation (Mangas et al., 2024b, 2025b). Indeed, following the “Gender-as-Relational” (GAR; Thomeer et al., 2020; Umberson et al., 2018) conceptual framework, it is proposed that, in sexual diversities, different psychosexual dimensions depend more on the gender of the person with whom individuals relate than on their own self-identified sexual orientation, including the orgasmic experience (Blair et al., 2017; Pérez-Amorós et al., 2024).

The results of this study provide evidence of validity to the Multidimensional Model of the Subjective Orgasm Experience (MMSOE) in the context of solitary masturbation, confirming its usefulness in LGB people. The relevance of genital arousal, or objective arousal, in explaining the orgasmic experience in the case of men is highlighted, whereas subjective sexual arousal is more predominant in the case of women. The MMSOE—and our findings using it as a theoretical background to relate its dimensions to different measures of sexual arousal—underline the importance of further addressing orgasm: (1) from a psychological point of view, a perspective that differs from the traditionally more physiological one, (2) in the context of solitary masturbation, a less studied scenario compared to the dyadic one, and (3) in sexual diversities, a group traditionally relegated to the background in research.

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**Data Availability:** The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation. The data are not publicly available due to privacy.

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