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Condom Use Beliefs Differ According to Regulatory Focus: A Mixed-Methods Study in Portugal and Spain

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ABSTRACT

Reports worldwide have been showing increasing rates of sexually transmitted infections (STIs) and condomless sex in recent years. Research has identified several individual and situational variables that can determine the decision to use condoms or forgo their use. We argue that such a decision can also be shaped by motives related to pleasure and safety (i.e., regulatory focus in sexuality). Using open ended questions, we asked 742 Portuguese and Spanish adults to indicate situations and reasons that could inform the decision making process with casual partners and the functions/attributes related to condoms. Using thematic analyses, we coded the drivers of condomless sex and condom use into themes and subthemes, and computed their frequencies. Using quantitative measures, we also asked participants to indicate their condom use expectancies and perceived barriers. Comparing participants according to regulatory focus revealed some differences. Pleasure promotion participants were more likely to consider that condom use decision making is driven by unexpectedness, pleasure, and intimacy pursuit, attached more pleasure reduction functions to condoms, expected more negative outcomes in condom use, and endorsed more sensation and partner barriers in condom use. In contrast, disease prevention participants were more likely to consider that condom use decision making is driven by adequate sexual education, responsibility, and behavioral control, and attached more health protective functions to condoms. These differences can inform the development of tailored intervention and awareness campaigns aimed at helping people to use condoms more consistently with casual partners and to avoid behaviors that put them at risk of STI transmission.

Sexually transmitted infections (STIs) represent a serious public health concern (Scott-Sheldon & Chan, 2020) due to their severe costs to health (e.g., unpleasant symptoms; adverse health conditions; Gottlieb et al., 2014), social relations (e.g., consequences of the stigma attached to STIs; Geter et al., 2018; Morris et al., 2014), and the economy (e.g., contact tracing; direct and indirect costs; Chesson et al., 2021; Schnitzler et al., 2021). Using condoms correctly and consistently remains among the most effective strategies for curbing the spread of STIs (UNFPA, WHO & UNAIDS, 2015). Several efforts have been made to improve the experience of using condoms (e.g., developing and testing new products; Beksinska et al., 2020; Coffey & Kilbourne-Brook, 2021; Gallo et al., 2022). However, recent reports worldwide show a high prevalence of STIs (Barbaric et al., 2022; Kreisel et al., 2021; Marcus et al., 2021; Sentís et al., 2021; Vives et al., 2020; Zheng et al., 2022), along with low condom use rates (Copen et al., 2022; Felisbino-Mendes et al., 2021; Fetner et al., 2020; Harper et al., 2018; Koumans et al., 2020; Lindberg et al., 2021). Inconsistent condom use may occur because condoms tend to be used mostly for birth control and only seldom for protecting against STIs (Fairfortune et al., 2020; Fu et al., 2021). Furthermore, condoms are often perceived as barriers to pleasure (Mabire et al., 2019; Milhausen et al., 2018).

Portugal and Spain have been among the western European countries with the highest rates of HIV diagnoses (ECDC, 2021). Studies have consistently shown a large proportion of people in both countries who have insufficient knowledge about STIs, perceive a low risk of becoming infected, and/or have never been tested for STIs (e.g., Espada et al., 2015; Giménez-García et al., 2022, 2019; Reis et al., 2013). Studies have also shown that people in both countries report not using condoms regularly (e.g., Alvarez-Bruned et al., 2015; Ballester-Arnal et al., 2022; Espada et al., 2016; Reis et al., 2018; Rodrigues et al., 2020). However, to the best of our knowledge, research has yet to examine how people perceive condoms and condom use and whether such perceptions differ based on motivational variables related to pleasure and safety. The Regulatory Focus Theory (Higgins, 2015) postulates that having a promotion focus motivates people toward pleasure and gains pursuit, even at the cost of negative outcomes. In contrast, having a prevention focus motivates people toward safety and loss avoidance, even at the cost of missing opportunities. Hence, people more focused on promotion take more risks to attain pleasure, whereas those more focused on prevention are more protective of their health and safety (Evans-Paulson et al., 2022; Fuglestad et al., 2013; Rodrigues et al., 2022; Zou & Scholer, 2016). Building upon this evidence, we conducted

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a study as part of the Prevent2Protect project (https://osf.io/rhg7f/) using qualitative and quantitative methodologies to determine if motives for promotion and prevention in sexuality shape the beliefs about condoms and condom use.

Reasons for (Not) Using Condoms

People sometimes have condomless sex despite perceiving condoms as effective protection against unwanted pregnancies and STIs (Maharaj & Cleland, 2006; de Visser & Smith, 2001). The decision to use a condom or forgo its use is complex and can be shaped by multiple individual and situational variables. For example, people can have condomless sex because they lack proper knowledge of how to use condoms correctly, feel discomfort when using condoms, have an anxious attachment style, lack self-control in a given situation, are sexually aroused, are under the influence of alcohol or drugs, were not expecting to have sex, use other contraceptive methods, perceive themselves to be at low risk of negative outcomes, believe in their partner's health, or want to pursue sexual pleasure (Analogbei et al., 2020; Carvalho et al., 2015; Civic, 2000; Corbett et al., 2009; Crosby et al., 2005; Dir et al., 2018; Farrington et al., 2016; Fehr et al., 2015; Martin-Smith et al., 2018; Morales et al., 2018; Prata et al., 2006; Protogerou et al., 2018; Rodrigues et al., 2020; Sanders et al., 2012; Skakoon-Sparling & Milhausen, 2021; Starks et al., 2014; Strachman & Impett, 2009; de Visser & O'Neill, 2013; Zimmerman et al., 2007). Condom use decisions also depend on sexual activity characteristics. For example, condom use is less prevalent for oral sex than intercourse (Glynn et al., 2017; Habel et al., 2018; Leichliter et al., 2007; Molina & Tejada, 2018; Santa-Bárbara et al., 2020). Reasons to have condomless oral sex include wanting to have more pleasure, not having thought about it, not wanting to use condoms, or not having the risk of unplanned pregnancies, whereas reasons to use condoms when having oral sex include wanting to avoid diseases and to be more hygienic (Stone et al., 2006; Strome et al., 2022). Condom use also varies according to the type of partner. For example, de Visser and Smith (2001) found that even though people are less likely to have prior condom use agreements with casual partners, they are more likely to use condoms when they already intended to do so and discussed condom use during the encounter. This is particularly relevant for several reasons. Some people have condomless sex (or fail to discuss the possibility of using condoms) when they anticipate a negative reaction from their partners (Brown et al., 2008). Moreover, people with an STI are less likely to disclose their health status when perceiving their partners as casual (Farrington et al., 2016; Mathews et al., 2018; but see Newton & McCabe, 2008). The decision to have condomless sex is also influenced by one's perceived ability to assess the health status of the casual partner (Eleftheriou et al., 2016). Lastly, people are likely to have condomless sex when they trust their partners, feel emotionally safer with them, believe that condoms interfere with intimacy, or want to increase commitment (Ajayi et al., 2019; Casola et al., 2022; Corbett et al., 2009; Fehr et al., 2015; Fortenberry, 2019; Harvey et al., 2018; Lachowsky et al., 2021; Skakoon-Sparling & Cramer, 2021; Starks et al., 2014).

We propose a novel perspective to organize these findings by arguing that sexual health decision-making is grounded in individual motives and expectations. For example, people with more concurrent partners were more likely to have been diagnosed with an STI years later (Lyons, 2017). Also, condomless sex is more likely when people are sexually aroused (possibly due to poorer restraint or self-control), more familiar with their partners, or motivated to establish a relationship (Skakoon-Sparling & Cramer, 2016, 2020, 2021; Skakoon-Sparling et al., 2016). Moreover, expecting condoms to decrease pleasure (e.g., less intimate and pleasurable sex) has been shown to predict condomless sex, whereas the way people feel about themselves when using condoms (e.g., a sense of responsibility and feeling less worried) predicts condom use later on (Albarracín et al., 2000; Wongsomboon & Cox, 2021). Likewise, people with greater sexual inhibition (e.g., being able to restrain oneself in potentially dangerous situations) are better at refraining from taking sexual risks (Skakoon-Sparling & Milhausen, 2021). Taken together, these findings resonate with the assumption that people are either motivated by pleasure or security principles (Higgins, 2015). People more focused on pleasure promotion take risks and believe they control the outcomes of their behaviors (Guo & Spina, 2015; Langens, 2007; Zou & Scholer, 2016). In contrast, people more focused on risk prevention are cautious with their health and safety, enact protective behaviors, and rely on themselves to control such behaviors (Aryee & Hsiung, 2016; Avraham et al., 2016; Fuglestad et al., 2013; Lemarié et al., 2019). This theoretical framework has been extended to sexuality, with research showing that people more focused on promoting sexual pleasure use condoms less frequently with casual partners, report being more sexually satisfied, and get tested for STIs more often (Evans-Paulson et al., 2022; Rodrigues et al., 2022). In contrast, people more focused on preventing diseases are more aware of sexual health threats, have more positive condom attitudes, and use condoms more often with casual partners (Rodrigues & Lopes, 2022; Rodrigues et al., 2019, 2020). This shows that people act differently when it comes to their sexual health-decision making, depending on their predominant regulatory focus in sexuality. However, it also raises questions of whether such differences translate to condom beliefs and expected outcomes in condom use.

Current Study

In a pre-registered study (https://osf.io/g2mbd/), we used open- and close-ended questions to tackle the complexities underlying the condom use decision-making process in a sample of Portuguese and Spanish people from a regulatory focus perspective. We used thematic analyses to identify themes and subthemes related to condom use beliefs (Braun & Clarke, 2006) and examined condom use expectancies and barriers using preexisting instruments (i.e., Crosby et al., 2017; Nydegger et al., 2015). In both analyses, we explored differences by comparing participants more focused on pleasure promotion and those more focused on disease prevention. Because people with concurrent or sequential casual partners are potentially exposed to more sexual health risks and negative health outcomes (e.g., de Visser & Smith, 2001), we

recruited only participants who have had sexual activity in the past (i.e., sexually experienced) and were not in a significant romantic relationship.

In the qualitative analyses, we expected people more focused on pleasure promotion to indicate more situations and reasons that foster condomless sex (H1) and endorse more pleasure-reduction functions attached to condoms (H2). In contrast, people more focused on disease prevention should identify more situations and reasons related to condom use (H3) and endorse more health-protection functions attached to condoms (H4). In the quantitative analyses, we expected people more focused on pleasure promotion to endorse more negative outcomes related to condom use (e.g., uncomfortable; H5), as well as more barriers related to their partners (e.g., getting turned off when asked to use a condom; H6a), physical sensations (e.g., pleasure reduction; H6b), and relational motives (e.g., feeling less close to the partner; H6c). In contrast, people more focused on disease prevention should endorse safer sex outcomes related to condom use (e.g., protection against STIs; H7). We additionally explored if quantitative results differed according to *a priori* demographic differences (e.g., country, gender, sexual orientation; Castro, 2016; Farmer & Meston, 2006; Lazarus et al., 2009; Muñoz-Silva et al., 2009, 2007).

Method

Participants and Procedure

This study was part of the Prevent2Protect project (https://osf.io/rhg7f/), and details regarding the recruitment process and procedure can be found elsewhere (Rodrigues et al., 2023). We recruited participants through the Clickworker platform for an online survey about sexuality and sexual practices. After providing informed consent, participants were asked to report their age, past sexual activity, current relationship status, and country of residence. Participants were automatically redirected to the end of the survey if they were below 18 years old, never had any sexual activity in the past, were in a significant romantic relationship, or lived outside Portugal or Spain. Eligible participants were compensated with 5€ upon survey completion. As shown in Table 1, participants (N = 742) were, on average, 31 years old (M = 31.42, SD = 9.16), most identified as White (78.0%), and most identified as heterosexual (77.9%). All other demographic characteristics were balanced across the sample, with around half of our sample identifying as women (56.3%), residing in Spain (55.8%), living in metropolitan areas (62.1%), having a university degree (44.5%), working (57.8%), and coping on their current income (45.4%).

Group comparisons also revealed some differences, all $p \leq .006$. Specifically, a higher proportion of Portuguese participants identified as Black, identified as heterosexual, had a high school degree, were stay-at-home parents or unemployed, and were finding it very difficult to live on their current income. In contrast, a higher proportion of Spanish participants identified as White, identified as bisexual, were graduates or post-graduates, were students or working, and were living comfortably or very comfortably on their current income.

Measures

Apart from the regulatory focus in sexuality scale (which was used to categorize participants as pleasure promotion or disease prevention), the data herein reported have not already been published. For the quantitative analyses, we examined regulatory focus differences in the Condom Use Barriers (Crosby et al., 2017) and Condom Use Expectancies scales (Nydegger et al., 2015). As neither of these scales has been used with a Portuguese sample before, we computed an Exploratory Factor Analysis (EFA) with principal axis factoring and promax rotation and examined reliabilities.

Regulatory Focus in Sexuality Scale

We used the measure developed by Rodrigues et al. (2019) and asked participants to "Please read each sentence and indicate to what extent each sentence is true to you by indicating the number that best represents your answer." Using 7-point rating scales (from 1 = *Not at all true of me* to 7 = *Very true of me*), participants indicated the extent to which their sexual motives and behaviors are focused on promotion (six items, α = .82; e.g., "I am typically striving to fulfill my desires with my sex life") or prevention (three reverse-scored items, α = .70; e.g., "Not being careful enough with my sex life has gotten me into trouble at times"). We then computed a regulatory focus index by subtracting prevention from promotion scores. Participants with scores higher than 0 were categorized as more focused on pleasure promotion (50.9%), whereas participants with scores lower than 0 were categorized as more focused on disease prevention (49.1%). Participants with scores equal to 0 were equally focused on promotion and prevention. Given the low sample size of this group (n = 28), these participants were removed from the analyses and are not reflected in the final sample size (see Rodrigues et al., 2023).

Situations and Reasons Related to Condom Use and Condom Functions

Using open-ended questions, we asked participants to indicate situations and reasons that could facilitate the decision to use condoms: "Having sex with or without condoms can occur in different situations and for several reasons. Please list situations and reasons that can improve the likelihood of using condoms with casual partners (i.e., sex partners with whom people do not have a significant or romantic relationship)?"; or serve as a barrier to such use: "Having sex with or without condoms can occur in different situations and for several reasons. Please list some of the situations and reasons that can improve the likelihood of having sex without using condoms with casual partners?." We additionally asked participants about the functions of condoms: "From your perspective, which functions, or attributes, are associated with condoms that lead people to decide whether or not to use condoms with casual partners?"

Table 1. Demographic characteristics.

	Country			
	Overall (N = 742) M (SD) or n (%)	Portugal (n = 328) M (SD) or n (%)	Spain (n = 414) M (SD) or n (%)	Group comparisons
Age (min = 18, max = 62)	31.42 (9.16)	30.68 (8.52)	32.00 (9.58)	$t(740) = 1.96$, $d = 0.15$
Ethnic background				$\chi^2(6) = 19.35^{**}$, $V = 0.16$
Arab	6 (0.8)	1 (0.3)	5 (1.2)	
Asian	2 (0.3)	1 (0.3)	1 (0.2)	
Black	28 (3.8)	22[a] (6.7)	6[b] (1.4)	
Latinx	118 (15.9)	59 (18.0)	59 (14.3)	
Mixed race	6 (0.8)	2 (0.6)	4 (1.0)	
White	579 (78.0)	241[b] (73.5)	338[a] (81.6)	
Prefer not to answer	3 (0.4)	2 (0.6)	1 (0.2)	
Gender				$\chi^2(3) = 1.32$, $V = 0.04$
Man	316 (42.6)	138 (42.1)	178 (43.0)	
Non-binary	7 (0.9)	4 (1.2)	3 (0.7)	
Woman	418 (56.3)	186 (56.7)	232 (56.0)	
Prefer not to answer	1 (0.1)	0 (0.0)	1 (0.2)	
Sexual orientation				$\chi^2(5) = 16.40^{**}$, $V = 0.15$
Asexual	3 (0.4)	0 (0.0)	3 (0.7)	
Bisexual	114 (15.4)	33[b] (10.1)	81[a] (19.6)	
Heterosexual	578 (77.9)	271[a] (82.6)	307[b] (74.2)	
Lesbian/Gay	39 (5.3)	19 (5.8)	20 (4.8)	
Pansexual	6 (0.8)	4 (1.2)	2 (0.5)	
Queer	2 (0.3)	1 (0.3)	1 (0.2)	
Residence				$\chi^2(4) = 3.36$, $V = 0.07$
Metropolitan area	461 (62.1)	196 (59.8)	265 (64.0)	
Rural area	90 (12.1)	43 (13.1)	47 (11.4)	
Small town	4 (0.5)	1 (0.3)	3 (0.7)	
Suburban area	186 (25.1)	87 (26.5)	99 (23.9)	
Prefer not to answer	1 (0.1)	1 (0.3)	0 (0.0)	
Completed education				$\chi^2(5) = 38.10^{***}$, $V = 0.23$
Primary or secondary school	14 (1.9)	7 (2.1)	7 (1.7)	
High school	221 (29.8)	134[a] (40.9)	87[b] (21.0)	
Professional training	7 (0.9)	2 (0.6)	5 (1.2)	
University degree	330 (44.5)	130[b] (39.6)	200[a] (48.3)	
Post-graduate (Master's; Ph.D.)	168 (22.6)	54[b] (16.5)	114[a] (27.5)	
Prefer not to answer	2 (0.3)	1 (0.3)	1 (0.2)	
Occupation				$\chi^2(5) = 24.50^{***}$, $V = 0.18$
Retired	5 (0.7)	2 (0.6)	3 (0.7)	
Stay-at-home parent	7 (0.9)	6[a] (1.8)	1[b] (0.2)	
Student (part or full time)	213 (28.7)	72[b] (22.0)	141[a] (34.1)	
Unemployed	82 (11.1)	45[a] (13.7)	37[b] (8.9)	
Working (part or full time)	429 (57.8)	203[b] (61.9)	226[a] (54.6)	
Prefer not to answer	6 (0.8)	0 (0.0)	6 (1.4)	
Socioeconomic status				$\chi^2(5) = 17.36^{**}$, $V = 0.15$
Finding it very difficult on current income	52 (7.0)	32[a] (9.8)	20[b] (4.8)	
Finding it difficult on present income	162 (21.8)	81 (24.7)	81 (19.6)	
Coping on present income	337 (45.4)	149 (45.4)	188 (45.4)	
Living comfortably on present income	154 (20.8)	56[b] (17.1)	98[a] (23.7)	
Living very comfortably on present income	26 (3.5)	6[b] (1.8)	20[a] (4.8)	
Prefer not to answer	11 (1.5)	4 (1.2)	7 (1.7)	

Note. Different superscripts between groups indicate significant differences in column proportions with Bonferroni correction at $p < .050$.
$^{***}p \leq .001$, $^{**}p \leq .010$, $^{*}p \leq .050$.

Condom Use Expectancy Scale

We used the measure developed by Nydegger et al. (2015) to assess different outcomes when using condoms with casual partners ("Here is a list of some things that some people might experience when using a condom with a casual partner. How likely is it that these things happen to you when you use a condom with a casual partner?"). The scale includes positive outcomes (six items; e.g., "Sex feels good"), negative outcomes (five items; e.g., "Sex is uncomfortable"), and safe sex outcomes related to condom use (three items; e.g., "Sex is safe"). The last item from the original scale ("It protects me [my partner] from getting pregnant") was dropped from the study so that all items apply to eligible participants, regardless of sexual orientation (e.g., men who only have sex with other men) or any medical condition (e.g., infertility). Responses were given on 7-point rating scales (from 1 = *Strongly disagree* to 7 = *Strongly agree*). Similar to the original validation, results from our EFA showed a 13-item scale with a 3-factor structure that explained 63.15% of the total variance (for details, see https://osf.io/bfk43/). Items were mean aggregated to indicate the expectation of more positive outcomes (six items, $\alpha = .93$), more negative outcomes (five items, $\alpha = .89$), and safe sex outcomes (two items, Spearman-Brown coefficient = .64) in condom use.

Condom Barriers Scale

We adapted the measure developed by Crosby et al. (2017) to assess different types of barriers related to condoms when having sex with casual partners. Specifically, we asked

participants "Please indicate how much you agree or disagree with each statement below," using 7-point rating scales (from 1 = *Strongly disagree* to 7 = *Strongly agree*). We assessed barriers related to condom use in three domains: partner (five items; e.g., "I won't use a condom unless casual partners ask me to do it"), physical sensations (five items; e.g., "Condoms reduce the intensity of my orgasm"), and relational motives (four items; e.g., "I feel closer to casual partners without a condom"). Unlike the original 3-factor structure, results from our EFA showed a 12-item scale with a 2-factor structure that explained 59.75% of the total variance (for details, see https://osf.io/bfk43/). Items were mean aggregated to indicate sensation-related barriers (seven items, $\alpha = .90$) and partner-related barriers (five items, $\alpha = .89$).

Analytic Plan

First, we conducted qualitative analyses. Responses to each open-ended question were analyzed using data-driven thematic analyses (Braun & Clarke, 2006), allowing us to identify themes and subthemes related to the perceptions of condoms and condom use. Briefly, each analysis started by having two team members read the 8,397 entries and take notes for a possible codebook. Notes were then discussed, and a final list of codes was created based on consensus. Both members coded the responses independently. During this process, responses that could not be categorized ($n = 553$; e.g., "*It all depends on the situation and the moment*; "*Don't know*") or were repetitions given by the same participant ($n = 9$) were not considered. Also, when responses included more than one code ($n = 124$), each section of the response was coded independently (e.g., the response "*If they know each other and have been tested for STIs*" was coded as "Knowing the partner" and "Negative STI testing"). Codifications were compared, and discrepancies were discussed until an agreement was reached. After this, we organized the codes into themes and subthemes (e.g., the codes "Heat of the moment" and "Unexpected sex" were grouped into a theme) and discarded themes with less than 1% of mentions (e.g., "Religiosity"). This resulted in 7,493 valid responses. The themes and subthemes were organized according to their respective overall percentages, and the thematic tree was discussed with all team members. We then computed frequencies and percentages of valid responses for the overall sample and for participants categorized as pleasure promotion or disease prevention separately. We used χ^2 tests and Cramer's V effect sizes to examine differences between groups in the proportions of valid responses and on each theme and subtheme.

Second, we conducted quantitative analyses. We summarized the descriptive statistics of each measure and computed overall correlations. We then computed two linear mixed models (LMM)[1] to examine differences according to regulatory focus in responses to the Condom Use Expectancy and Condom Barriers scales. In each analysis, the full model included regulatory focus (i.e., promotion vs. prevention), scale factors (i.e., positive vs. negative vs. safe sex outcomes in the first model; and sensation-related vs. partner-related barriers in the second model) and their respective interactions, the strength of the regulatory focus difference (i.e., the absolute regulatory focus index score) and its interaction with scale factors as fixed effects, and by-participant random intercept. When group differences were found, we computed post-hoc comparisons with Bonferroni adjustment. Lastly, we examined if quantitative results differed between countries (1 = Portugal vs. 2 = Spain) or according to any *a priori* demographic differences in our sample (see Table 1). Given our subsamples sizes, we recategorized participants regarding ethnic background (1 = *nonwhite* vs. 2 = *White*), sexual orientation (1 = *LGBTQI+* vs. 2 = *Heterosexual*), completed education (1 = ≤ *12 years* vs. 2 = > *12 years*), occupation (1 = *Studying* vs. 2 = *Not studying*), and socioeconomic status (1 = *Struggling* vs. 2 = *Coping* vs. 3 = *Comfortable*; dummy coding with *Coping* as the reference category). All materials, anonymized data, and syntaxes supporting the reported findings are available on our OSF page (https://osf.io/bfk43/).

[1]We changed the original analytic plan considered in our pre-registration (i.e., two mixed repeated measures ANOVAs) for a more robust approach.

Results

Qualitative Analyses

For the situations and reasons in condom use decision-making, a total of 5,836 valid responses were considered (an average of eight responses per participant). These responses were categorized into seven themes related to condomless sex (53.90% from pleasure promotion participants, see Table 2) and eight themes related to condom use (51.68% from pleasure promotion participants, see Table 3). For the condom use functions and attributes, a total of 1,657 valid responses were considered (an average of two responses per participant) and categorized into five themes (51.84% from pleasure promotion participants).

Drivers of Condomless Sex with Casual Partners

Overall, participants considered that *lacking behavioral control* (i.e., difficulties restraining themselves in a given situation) facilitates condomless sex with casual partners (Theme 1), either because people are in the heat of the moment or were not expecting to have sex (Subtheme 1.1), or because people are under the influence of alcohol or other drugs (Subtheme 1.2). Another frequently mentioned theme was the *absence of perceived infection risk* (Theme 2), derived from people perceiving to be safe with casual partners they already know (Subtheme 2.1), trusting their partners (Subtheme 2.2), or having STI testing results (Subtheme 2.3). The *absence of proper sexual education* also fosters condomless sex (Theme 3), as some people prioritize less health protection (Subtheme 3.1) and lack knowledge about the possible consequences of not using condoms (Subtheme 3.2). Wanting to pursue *physical sensations* in sex is another driver of condomless sex (Theme 4), particularly when people have oral or anal sex (Subtheme 4.1), want to attain more sexual pleasure and excitement (Subtheme 4.2), or want to avoid barriers to sexual sensations (Subtheme 4.3). Moreover, certain *relationship dynamics* facilitate condomless sex (Theme 5) due to barriers imposed by (or related to) the partners (Subtheme 5.1) or the

Table 2. Drivers of condomless sex with casual partners: Frequencies of themes, subthemes, examples, and differences according to regulatory focus in sexuality.

Theme	Subtheme	Examples for each group	Groups: Pleasure promotion	Groups: Disease prevention	Group comparisons χ^2 (*V*)
1. Lack of behavioral control (*n* = 997; 33.50%)			556 (34.66%)	441 (32.14%)	2.11 (0.03)
	1.1. Heat of the moment and unexpected encounters (*n* = 657; 22.08%)	Promotion: "*When you're really horny*" Prevention: "*When you didn't expect to have sex*"	379 (23.63%)	278 (20.26%)	4.87* (0.04)
	1.2. Alcohol and/or drug use (*n* = 340; 11.42%)	Promotion: "*Drugs and alcohol*" Prevention: "*When you're drunk*"	177 (11.03%)	163 (11.88%)	0.52 (0.01)
2. Lack of infection risk (*n* = 643; 21.61%)			356 (22.19%)	287 (20.92%)	0.71 (0.02)
	2.1. Perceived safety from knowing the partner (*n* = 446; 14.99%)	Promotion: "*Partners you have known for a long time*" Prevention: "*When people know the sex life of their partners*"	240 (14.96%)	206 (15.01%)	0.00 (0.00)
	2.2. Trusting the partner (*n* = 147; 4.94%)	Promotion: "*When you trust your partner*" Prevention: "*After getting blood test results for STIs*"	80 (4.99%)	67 (4.88%)	0.02 (0.00)
	2.3. Having STI testing results (*n* = 50; 1.68%)	Promotion: "*If they both tested negatively in an STI test*" Prevention: "*If partners were tested recently*"	36 (2.24%)	14 (1.02%)	6.71** (0.05)
3. Lack of sexual education (*n* = 420; 14.11%)			174 (10.85%)	246 (17.93%)	30.60*** (0.10)
	3.1. Not prioritizing health protection (*n* = 267; 8.97%)	Promotion: "*When the attraction is stronger than danger*" Prevention: "*When people are irresponsible*"	107 (6.67%)	160 (11.66%)	22.56*** (0.09)
	3.2. Not knowing the health consequences (*n* = 153; 5.14%)	Promotion: "*When partners say they'll use the pull-out method*" Prevention: "*Believing you don't need a condom for oral sex*"	67 (4.18%)	86 (6.27%)	6.63** (0.05)
4. Physical sensations (*n* = 296; 9.95%)			187 (11.66%)	109 (7.94%)	11.39*** (0.06)
	4.1. Type of sex (*n* = 137; 4.60%)	Promotion: "*In anal sex*" Prevention: "*When you have oral sex*"	81 (5.05%)	56 (4.08%)	1.58 (0.02)
	4.2. Sexual pleasure and excitement (*n* = 107; 3.60%)	Promotion: "*Because you feel skin on skin, and it is more exciting*" Prevention: "*To have new experiences*"	73 (4.55%)	34 (2.48%)	9.17** (0.06)
	4.3. Barrier to sexual sensation (*n* = 52; 1.75%)	Promotion: "*When the partner loses the erection*" Prevention: "*Uncomfortable using condoms*"	33 (2.06%)	19 (1.38%)	1.95 (0.03)
5. Relationship dynamics (*n* = 208; 6.99%)			124 (7.73%)	84 (6.12%)	2.94 (0.03)
	5.1. Partner barriers (*n* = 125; 4.20%)	Promotion: "*When the man insists on not using condoms*" Prevention: "*When the partner says you don't need it*"	69 (4.30%)	56 (4.08%)	0.09 (0.01)
	5.2. Intimacy pursuit (*n* = 83; 2.79%)	Promotion: "*When there's more intimacy*" Prevention: "*Potentially serious relationship*"	55 (3.43%)	28 (2.04%)	5.26* (0.04)
6. Absence of preparatory behaviors (*n* = 207; 6.96%)			102 (6.36%)	105 (7.65%)	1.91 (0.03)
	6.1. Not having condoms at the moment (*n* = 147; 4.94%)	Promotion: "*When you forget to buy protection*" Prevention: "*When there are no more condoms at home*"	74 (4.61%)	73 (5.32%)	0.79 (0.02)
	6.2. Unable to get condoms (*n* = 60; 2.02%)	Promotion: "*You don't have enough money to buy condoms*" Prevention: "*When there's no free condom distribution*"	28 (1.75%)	32 (2.33%)	1.29 (0.02)
7. Pregnancy motives (*n* = 205; 6.89%)			105 (6.55%)	100 (7.29%)	0.64 (0.02)
	7.1. Lack of risk for unplanned pregnancies (*n* = 150; 5.04%)	Promotion: "*If you're on the birth control pill*" Prevention: "*When people use other contraceptive methods*"	76 (4.74%)	74 (5.39%)	0.66 (0.02)
	7.2. Pregnancy intentions (*n* = 55; 1.85%)	Promotion: "*If people want to get pregnant*" Prevention: "*If people don't fear getting pregnant*"	29 (1.81%)	26 (1.90%)	0.03 (0.00)

Note. Reported are the frequencies and percentages of the valid responses.
*$p \leq .050$. **$p \leq .010$. ***$p \leq .001$.

Table 3. Drivers of condom use with casual partners: Frequencies of themes, subthemes, examples, and differences according to regulatory focus in sexuality.

			Groups		
Theme	Subtheme	Examples for each group	Pleasure promotion	Disease prevention	Group comparisons x^2 (*V*)
1. Risk awareness (*n* = 927; 32.41%)			543 (36.74%)	384 (27.79%)	26.13*** (0.10)
	1.1. High-risk situations and one-night stands (*n* = 498; 17.41%)	Promotion: "*When having a threesome*" Prevention: "*Knowing that the partner has multiple sex partners*"	315 (21.31%)	183 (13.24%)	32.35*** (0.11)
	1.2. First dates and lack of trust (*n* = 290; 10.14%)	Promotion: "*When you're insecure about the other person*" Prevention: "*Not trusting the sex partner*"	148 (10.01%)	142 (10.27%)	0.05 (0.00)
	1.2. Current infections (*n* = 139; 4.86%)	Promotion: "*A person with HIV or any other STI*" Prevention: "*When you know your partner has an STI*"	80 (5.41%)	59 (4.27%)	2.02 (0.03)
2. Safety concerns (*n* = 790; 27.62%)			351 (23.75%)	439 (31.77%)	22.96*** (0.09)
	2.1. Responsibility and precaution (*n* = 526; 18.39%)	Promotion: "*Adult and responsible partners*" Prevention: "*When people are conscious*"	224 (15.16%)	302 (21.85%)	21.34*** (0.09)
	2.2. Health safety (*n* = 153; 5.35%)	Promotion: "*When people don't want to catch diseases*" Prevention: "*Protection against STIs*"	84 (5.68%)	69 (4.99%)	0.67 (0.02)
	2.3. Sexual education (*n* = 111; 3.88%)	Promotion: "*Know the diseases caused by lack of protection*" Prevention: "*When people received adequate sexual education*"	43 (2.91%)	68 (4.92%)	7.74** (0.05)
3. Behavioral control (*n* = 403; 14.09%)			182 (12.31%)	221 (15.99%)	7.98** (0.05)
	3.1. Planned or controlled sexual activity (*n* = 356; 12.45%)	Promotion: "*When it's planned*" Prevention: "*When you have the time*"	157 (10.62%)	199 (14.40%)	9.35** (0.06)
	3.2. Self-control (*n* = 47; 1.64%)	Promotion: "*When you're not drunk*" Prevention: "*When people are sober*"	25 (1.69%)	22 (1.59%)	0.04 (0.00)
4. Pregnancy concerns (*n* = 284; 9.93%)		Promotion: "*When people want to avoid an unwanted pregnancy*" Prevention: "*Fear of becoming pregnant*"	149 (10.08%)	135 (9.77%)	0.08 (0.01)
5. Sexual activities (*n* = 177; 6.19%)			108 (7.31%)	69 (4.99%)	6.59** (0.05)
	5.1. Type of sex (*n* = 91; 3.18%)	Promotion: "*To have anal sex*" Prevention: "*When you have intercourse*"	53 (3.59%)	38 (2.75%)	1.62 (0.02)
	5.2. Sexual pleasure and new experiences (*n* = 86; 3.01%)	Promotion: "*People want to try different flavored condoms*" Prevention: "*To increase lubrification and decrease pain*"	55 (3.72%)	31 (2.24%)	5.35* (0.04)
6. Preparatory behaviors (*n* = 107; 3.74%)			44 (2.98%)	63 (4.56%)	4.96* (0.04)
	6.1. Condom availability (*n* = 71; 2.48%)	Promotion: "*When people have condoms at hand*" Prevention: "*Always carry a condom with them*"	31 (2.10%)	40 (2.89%)	1.87 (0.03)
	6.2. Access to condoms (*n* = 36; 1.26%)	Promotion: "*When a friend gives you one*" Prevention: "*When people have the money to buy condoms*"	13 (0.88%)	23 (1.66%)	3.54 (0.04)

(*Continued*)

Table 3. (Continued).

Theme	Subtheme	Examples for each group	Groups		Group comparisons x^2 (*V*)
			Pleasure promotion	Disease prevention	
7. Communication (*n* = 100; 3.50%)			50 (3.38%)	50 (3.62%)	0.12 (0.01)
	7.1. Direct communication and request (*n* = 69; 2.41%)	Promotion: "*When the partner demands it*" Prevention: "*When there's communication about condom use*"	31 (2.10%)	38 (2.75%)	1.29 (0.02)
	7.2. Mutual agreement (*n* = 31; 1.08%)	Promotion: "*When both partners want to use condoms*" Prevention: "*When you have a prior agreement*"	19 (1.29%)	12 (0.87%)	1.16 (0.02)
8. Hygiene and health (*n* = 72; 2.52%)		Promotion: "*Easier to clean after having sex*" Prevention: "*There's a risk of bacteria when you have anal sex*"	51 (3.45%)	21 (1.52%)	10.82*** (0.06)

Note. Reported are the frequencies and percentages of the valid responses.
*$p \leq .050$. **$p \leq .010$. ***$p \leq .001$.

pursuit of intimacy (Subtheme 5.2). Likewise, having condomless sex is more likely in the *absence of preparatory behaviors* (Theme 6), particularly when people fail to get condoms beforehand (Subtheme 6.1) or are unable to get condoms at the time (Subtheme 6.2). Lastly, *pregnancy motives* (Theme 7) facilitate condomless sex, either because unplanned pregnancies are unlikely (Subtheme 7.1) or because people are actively pursuing getting pregnant (Subtheme 7.2).

Aligned with our hypothesis, pleasure promotion participants produced a higher number of valid responses related to condomless sex, $p < .001$. These participants were more likely to indicate that the heat of the moment, $p = .027$, having STI testing results, $p = .010$, wanting more physical sensations, $p < .001$ (particularly sexual pleasure/excitement, $p = .002$), and wanting to pursue intimacy, $p = .022$, drive people to forgo condom use. Disease prevention participants were more likely to indicate that lacking sexual education, $p < .001$ (both not caring about health protection, $p < .001$, and not knowing the consequences, $p = .010$) foster condomless sex decision-making (Figure 1).

Drivers of Condom Use with Casual Partners

Overall, participants considered that condom use with casual partners is mainly driven by *risk awareness* (Theme 1) due to having sex in risky situations, such as one-night stands (Subtheme 1.1), after going on first dates but still not trusting their partners (Subtheme 1.2), or when people are currently infected with an STI (Subtheme 1.3). *Safety concerns* were another prominent driver of condom use (Theme 2), based on responsibility or precaution (Subtheme 2.1), the need to protect health (Subtheme 2.2), or having the proper sexual education (Subtheme 2.3). *Behavioral control* also facilitates condom use (Theme 3), particularly when people planned the sexual activity or are in a controlled environment (Subtheme 3.1) or have control over their actions (Subtheme 3.2), much like *pregnancy concerns* (Theme 4). Moreover, certain *sexual activities* foster condom use (Theme 5), particularly when people have penetrative sex (Subtheme 5.1) or use condoms to increase pleasure and have new experiences (Subtheme 5.2). People who *enact preparatory behaviors* are more likely to use condoms (Theme 6), particularly when they are prepared and got condoms beforehand (Subtheme 6.1) or have access to condoms if needed (Subtheme 6.2). Also, *communication* facilitates condom use (Theme 7), either because people directly address the topic or make a request (Subtheme 7.1) or establish a mutual agreement with their partners (Subtheme 7.2). The last theme was *hygiene and health* motives (Theme 8).

Against our expectations, the number of valid responses related to condom use was similar in both groups, $p = .073$. Pleasure promotion participants were more likely to indicate that condom use is fostered by risk awareness, $p < .001$ (particularly high-risk situations, $p < .001$), sexual activities, $p = .010$ (particularly sexual pleasure/new experiences, $p = .021$), and hygiene/health, $p < .001$. Disease prevention participants were

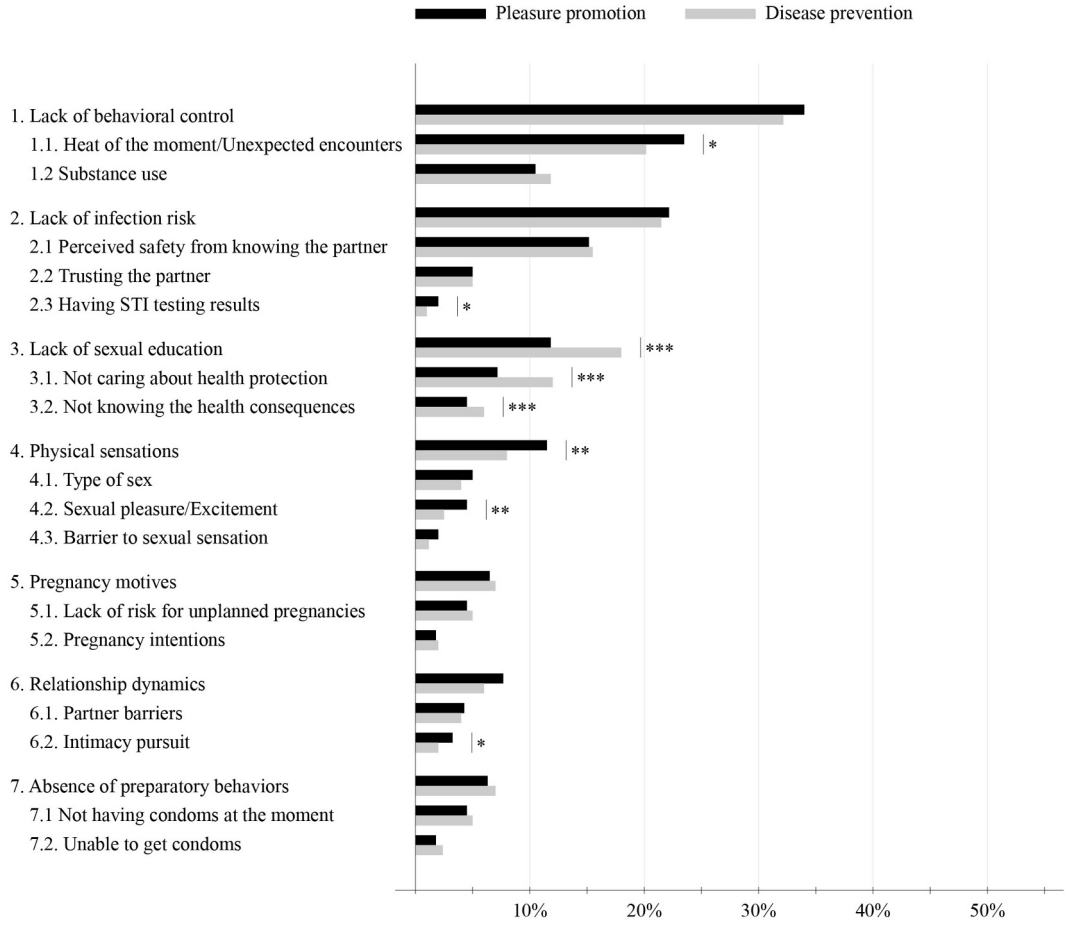

Figure 1. Drivers of condomless sex with casual partners according to regulatory focus in sexuality. *$p \leq .050$. **$p \leq .010$. ***$p \leq .001$.

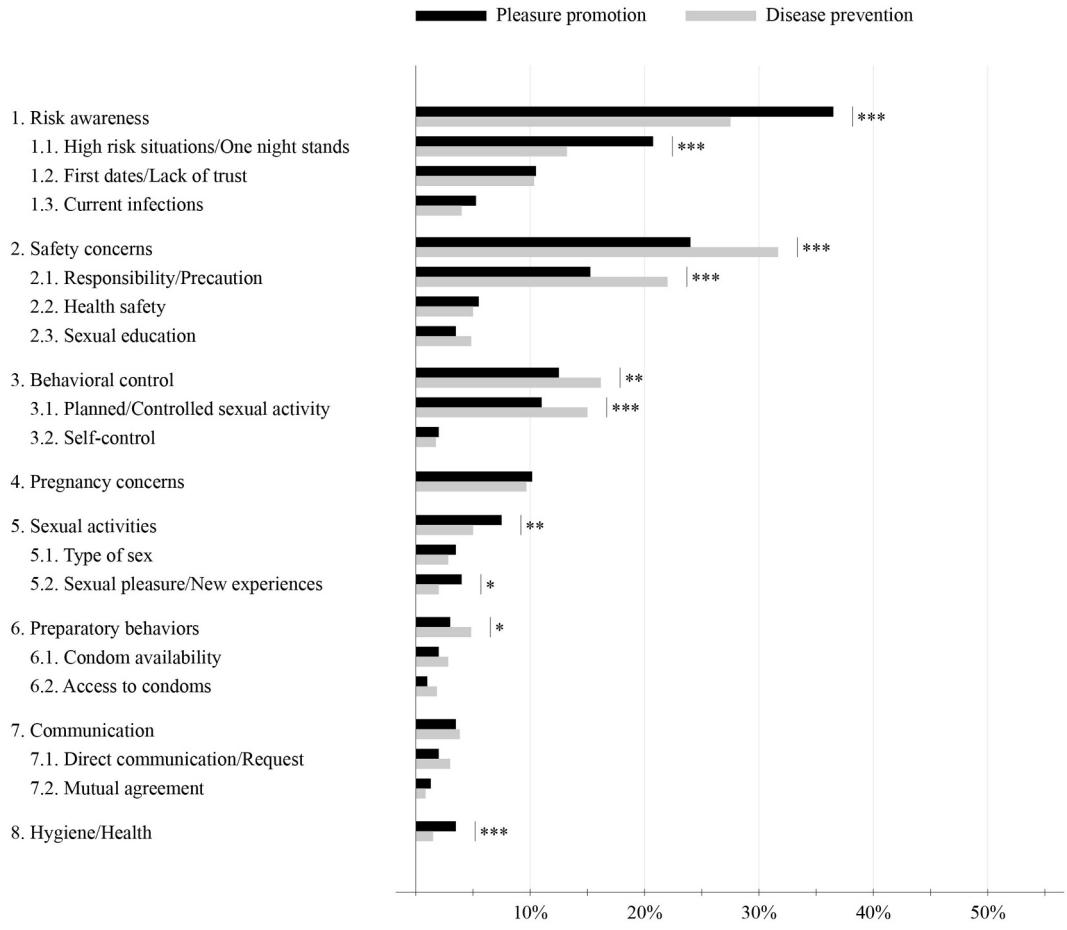

Figure 2. Drivers of condom use with casual partners according to regulatory focus in sexuality. *$p \leq .050$. **$p \leq .010$. ***$p \leq .001$.

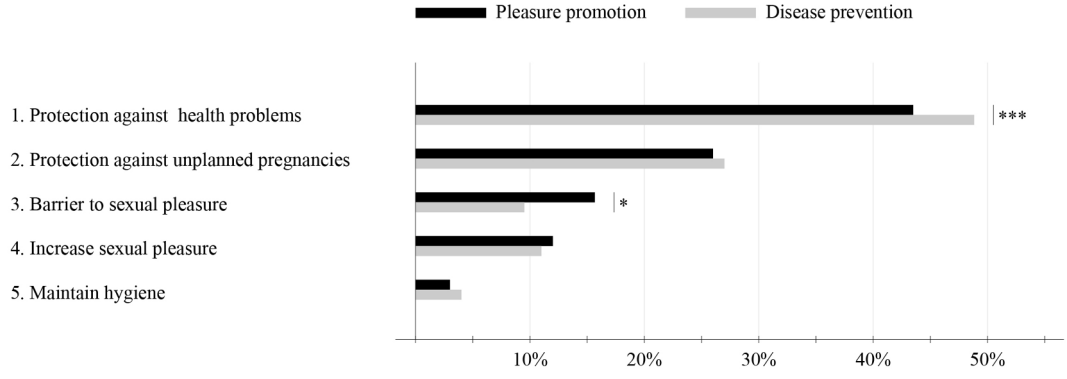

Figure 3. Functions and attributes of condoms according to regulatory focus in sexuality. *$p \leq .050$. **$p \leq .010$. ***$p \leq .001$.

more likely to indicate that condom use is driven by safety concerns, $p < .001$ (particularly responsibility/precaution, $p < .001$, and sexual education, $p = .005$), behavioral control, $p = .005$ (particularly planned/controlled sexual activity, $p = .002$), and preparatory behaviors, $p = .026$ (Figure 2).

Condom Functions and Attributes

Overall, participants indicated that condoms mostly serve to protect against health problems (46.11%) and unplanned pregnancies (26.49%). Participants also considered that, even though condoms are a barrier to sexual pleasure (12.61%), they can also help achieve more sexual pleasure (e.g., lubrication; 11.41%) and maintain hygiene (3.38%). No differences between groups were found in the number of valid responses related to condom functions, $p = .134$. As expected, pleasure promotion (vs. disease prevention) participants were more likely to endorse pleasure reduction functions to condoms (15.60% vs. 9.40%, respectively), $\chi^2 = 14.43$, $p < .001$,

Table 4. Descriptive statistics and correlations.

		Correlations					
	M (*SD*)	1	2	3	4	5	6
1. Promotion focus scores	4.95 (1.17)	-					
2. Prevention focus scores	4.94 (1.57)	−.24***	-				
3. CUES: Positive outcomes	4.97 (1.38)	.10**	.09*	-			
4. CUES: Negative outcomes	2.67 (1.39)	.10**	−.24***	−.69***	-		
5. CUES: Safer sex outcomes	6.21 (1.01)	.17***	−.10**	.19***	−.14***	-	
6. CBS: Sensation barriers	3.21 (1.60)	.11**	−.29***	−.58***	.74***	−.13***	-
7. CBS: Partner barriers	1.58 (1.04)	.02	−.30***	−.26***	.45***	−.33***	.45***

Note. Prevention and promotion focus indicate scores on the Regulatory Focus in Sexuality scale. CUES indicate scores on the Condom Use Expectancy Scale. CBS indicate scores on the Condom Barriers Scale.
***$p \leq .001$, **$p \leq .010$, *$p \leq .050$.

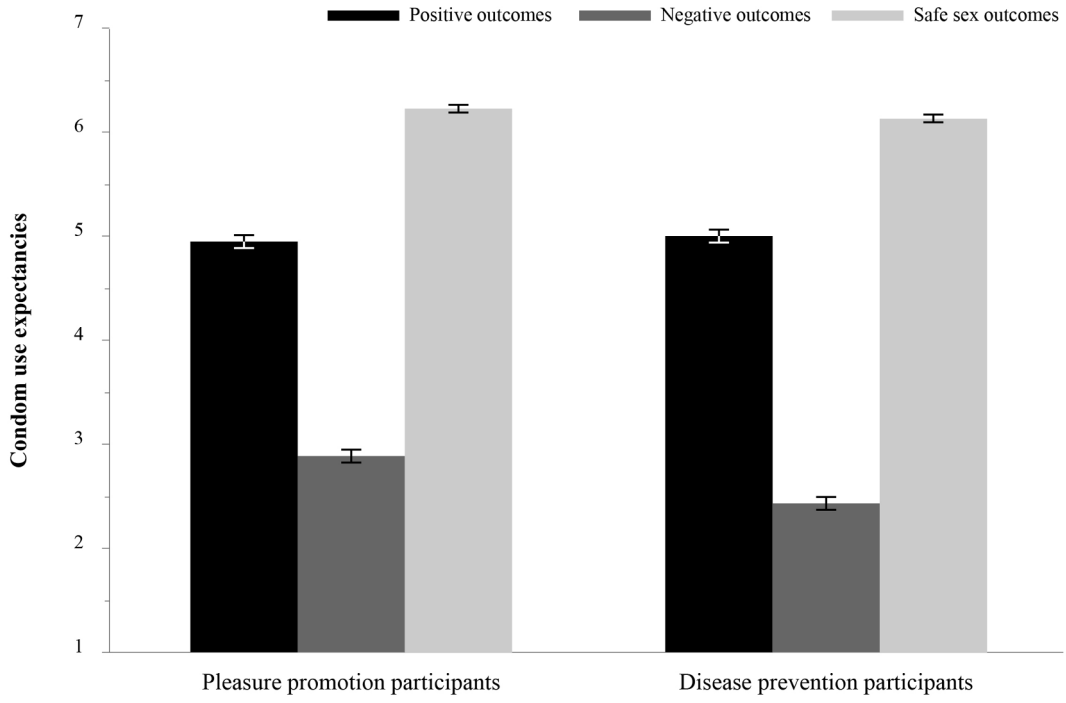

Figure 4. Differences in condom use expectancies according to regulatory focus in sexuality. Note: Bars represent standard errors.

$V = 0.09$. In contrast, disease prevention (vs. pleasure promotion) participants endorsed more health-protective functions to condoms (48.87% vs. 43.54%, respectively), $\chi^2 = 4.74$, $p = .030$, $V = 0.05$ (Figure 3).

Quantitative Analyses

Overall Correlations

Overall descriptive statistics and correlations are presented in Table 4. Results showed a moderate negative correlation between regulatory focus in sexuality scores, $p < .001$. Higher endorsement of promotion motives in sexuality was correlated with more positive, $p = .006$, and safe sex outcomes, $p < .001$. Similarly, higher endorsement of prevention motives in sexuality was correlated with more positive, $p = .014$, and safe sex outcomes, $p = .009$. Results also showed that participants with higher promotion in sexuality scores endorsed more negative outcomes, $p = .010$, and more sensation barriers, $p = .002$. In contrast, participants with higher prevention in sexuality scores endorsed fewer negative outcomes, $p < .001$, fewer sensation barriers, $p < .001$, and fewer partner barriers, $p < .001$.

Differences in Condom Use Expectancies

Results showed a main effect of regulatory focus, $F(1, 2214) = 9.96$, $p = .002$, with pleasure promotion participants reporting more overall condom use expectancies ($M = 4.70$, $SE = 0.03$) than disease prevention participants ($M = 4.53$, $SE = 0.03$). There were also differences between scale factors, $F(2, 2214) = 525.93$, $p < .001$. Post-hoc comparisons showed that, overall, participants endorsed more safe sex outcomes ($M = 6.21$, $SE = 0.05$), followed by positive outcomes ($M = 4.97$, $SE = 0.05$), $p < .001$, and endorsed negative outcomes the least ($M = 2.66$, $SE = 0.05$), $p < .001$. The interaction between factors was also significant, $F(2, 2214) = 8.32$, $p < .001$. Post-hoc comparisons showed that pleasure promotion participants endorsed more negative outcomes from condom use

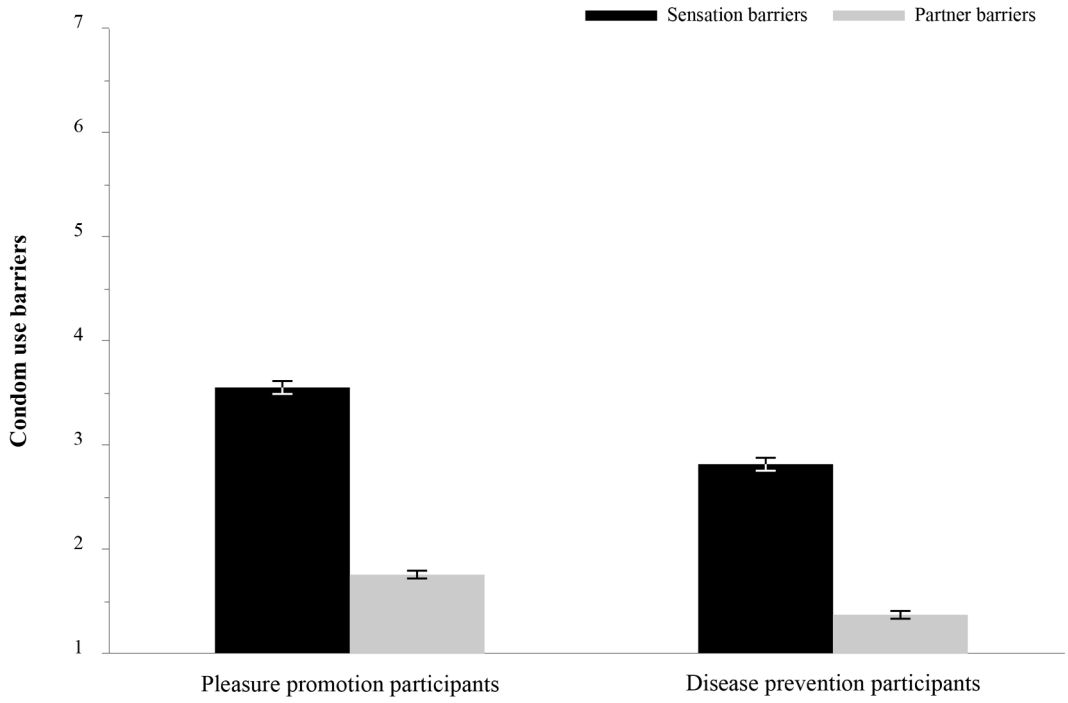

Figure 5. Differences in condom use barriers according to regulatory focus in sexuality. Note: Bars represent standard errors.

(M = 2.90, SE = 0.07) than disease prevention participants (M = 2.43, SE = 0.07), p < .001. No other comparisons between groups were significant, both $p \geq .394$ (see Figure 4). Neither the absolute regulatory focus difference, $F(2, 2214) = 1.62$, $p = .204$, nor its interaction with CUES factors, $F(2, 2214) = 1.37$, $p = .255$, were significant in this model.

Differences in Condom Use Barriers

Results showed a main effect of regulatory focus, $F(1, 1476) = 67.35$, $p < .001$, such that pleasure promotion participants reported more overall condom use barriers (M = 2.67, SE = 0.06) than disease prevention participants (M = 2.11, SE = 0.06). There were also differences between scale factors, $F(1, 1476) = 169.07$, $p < .001$, with participants endorsing overall more sensation barriers (M = 3.21, SE = 0.05) than partner barriers (M = 1.58, SE = 0.05). The interaction between factors was also significant, $F(2, 1476) = 5.86$, $p = .016$. Post-hoc comparisons showed that pleasure promotion (vs. disease prevention) participants endorsed both barriers to a greater extent, both $p < .001$, but the magnitude of the difference was higher for sensation barriers (M = 3.57, SE = 0.07 vs. M = 2.84, SE = 0.07, respectively) than partner barriers (M = 1.78, SE = 0.07 vs. M = 1.38, SE = 0.07, respectively) (see Figure 5). Again, the absolute regulatory focus difference, $F(2, 1476) = 1.55$, $p = .213$, and its interaction with CBS factors, $F(2, 1476) = 0.41$, $p = .520$, were non-significant.

Analyses Controlling for Possible Confounds

To determine the robustness of our results, we computed two LMMs additionally controlling for country, each demographic variable, and their interaction with scale factors as fixed effects. All main effects, interactions with regulatory focus, and post-hoc comparisons remained unchanged, all $p \leq .006$. Still, we found that occupation interacted with condom use expectancies factors, $p < .001$, such that participants who were studying endorsed more positive outcomes, $p < .001$, whereas participants who were not studying endorsed more negative outcomes, $p = .001$. No other covariates interacted with scale factors, all $p \geq .058$.

Discussion

We examined the beliefs about condoms and condom use in a sample of Portuguese and Spanish people and explored if these beliefs differed according to regulatory focus in sexuality. Overall, our qualitative analyses revealed different reasons driving the decision to have condomless sex or to use condoms with casual partners. Specifically, participants believed that decisions might depend on whether or not people are able to identify and perceive the health risks in a given situation, have a sense of responsibility or the proper knowledge to make decisions, have control over their behaviors, and enact behaviors that help them be prepared. These shared beliefs resonate in some of the central variables already considered in several models (for reviews, see Conner & Norman, 2015; Glanz et al., 2015). Other variables seem to play a crucial role in the decision-making process. Indeed, our participants believed that people also decide whether or not to use condoms with casual partners depending on their pregnancy intentions (either because people want to avoid pregnancy or become pregnant), the sexual activities they wish to engage in, or their willingness to pursue sexual pleasure. Congruently, participants believed that condoms mostly help people protect against potential health problems and unplanned pregnancies but can also serve as tools to achieve more pleasure or act as barriers against sexual sensations. These findings highlight the need to have a broader perspective on the determinants of condom use, which go beyond some of the most used variables (e.g., Robinson et al., 2002). For instance, sexual health interventions incorporating sexual pleasure discussions significantly improve condom use (Zaneva et al., 2022). Certain specific

beliefs also emerged from our analyses. Some participants believed that being pressured by their partners or wanting to deepen the relationship is likely to foster condomless sex. This is aligned with research examining how partner and relationship dynamics shape the decisions to use or forgo condom use (e.g., Fortenberry, 2019; Gebhardt et al., 2003; Skakoon-Sparling & Cramer, 2020, 2021; Starks et al., 2014). In contrast, some participants believed that being able to talk openly about using condoms can help condom use, which converges with past research showing the importance of communication (e.g., Noar et al., 2006). Lastly, some participants considered hygiene a driver of condom use and one of the functions of condoms. These findings add to the literature and show that hygiene maintenance is relevant not only for oral sex (Stone et al., 2006) but also for intercourse (Crosby et al., 2019; Graham et al., 2020). Somewhat at odds with these findings, we found that participants mainly endorsed safe sex and positive outcomes to condoms and only seldom endorsed negative outcomes, sensations barriers, or partner barriers. From our perspective, these findings highlight the importance of multiple variables in shaping condom beliefs and sexual behavior, some of which are not typically included in theoretical models and reflect the intricacies of the condom use decision-making process.

Aligned with our reasoning, differences in motives for security or pleasure (Higgins, 2015) can help explain the complexities and nuances related to sexual health decisions. Supporting our hypotheses, pleasure promotion participants indicated more condomless sex drivers than disease prevention participants (H1). Specifically, pleasure promotion participants believed that being faced with unplanned situations, having the results of STI tests, wanting to have more pleasure in sex, and wanting to increase intimacy with casual partners determine the decision to have condomless sex. They were more likely to consider condoms a barrier to sexual pleasure (H2). Quantitative analyses further showed that pleasure promotion participants endorsed more negative outcomes (H5) and more relational and pleasure barriers related to condoms (H6). Our findings converge with the assumption that people more focused on promotion take risks with their sexual health (Rodrigues et al., 2020) and favor their sexual satisfaction (Evans-Paulson et al., 2022), despite perceiving themselves to be more susceptible to STIs and getting tested more often (Rodrigues et al., 2022, 2023). Extending past studies indicating that condoms are perceived as barriers to sexual pleasure and intimacy (e.g., Gebhardt et al., 2003; Mabire et al., 2019; Milhausen et al., 2018; Starks et al., 2014), pleasure promotion people may consider condomless sex as a cue to deepen partner connectedness, particularly when they feel safer with their partners. Even though no hypotheses were advanced, we also found that pleasure promotion participants believed that being aware of risks, particularly in high-risk situations, having certain sexual activities, particularly activities that allow them to achieve pleasure, and being concerned with hygiene can foster condom use with casual partners. Even though past evidence has shown these people to be more impulsive and sexually unrestricted (Rodrigues et al., 2019), our findings suggest a reasoned decision-making process in certain situations, namely when potential costs to health/hygiene outweigh pleasure benefits (e.g., when in doubt of their partner's health status) or when condoms are used as part of the sexual activity (i.e., to increase pleasure not necessarily motivated by protection).

Against our expectations, disease prevention participants indicated as many condom use drivers as pleasure promotion participants (H3). Still, disease prevention participants believed that condom use with casual partners is facilitated when people are concerned with their safety, are responsible, have sexual education, have more self-control over the situation, plan the activity or have sex in a controlled environment, and enact preparatory behaviors. As expected, these participants believed that condoms served to protect their health and the health of others (H4), even though this belief was not reflected in a higher endorsement of safe sex outcomes (vs. pleasure promotion participants; H7). We also found that disease prevention participants believed that condomless sex is facilitated when people lack proper sexual education, prioritize to a lesser extent protecting their health and the health of others, or are unaware of the consequences of riskier sex. These findings are aligned with the assumption that being more focused on prevention drives people to be attentive to risks (Rodrigues et al., 2019) and cautious with their health (Zou & Scholer, 2016). Because feeling good about using condoms helps people use more condoms later on (Albarracín et al., 2000), our findings also converge with past research showing that people more focused on prevention use condoms more often, have more control over condom use, and perceive a lower risk of having an STI (Rodrigues et al., 2022, 2020).

There were also some differences according to occupation, with more positive outcomes endorsed by students and more negative outcomes endorsed by non-students. Despite any *a priori* demographic differences or even the strength of the difference between both groups, our quantitative findings remained significant and supported the robustness of the regulatory focus differences.

Limitations and Future Studies

We must acknowledge some limitations of this study. Given the goals of the Prevent2Protect project, we surveyed only participants who were single and sexually experienced. Moreover, we cannot rule out the possibility that participants leaned on social norms to indicate what people should be doing and not necessarily what people (or even themselves) actually do with casual partners. Likewise, some of our findings may have been biased by personal experiences with casual partners and may not generalize to other people (e.g., those in a significant relationship). Based on our current findings, future studies could consider developing a list of reasons that can determine the condom use decision-making process and ask a more diverse sample how relevant they consider each reason to be and how often each reason determined their own behavior. By adopting such a prototype approach (e.g., Birnie-Porter & Lydon, 2013; Harasymchuk & Fehr, 2012), researchers could determine the most central and peripheral reasons driving this decision and develop a new measure to be used in subsequent research. Comparisons according to relational

characteristics would extend our current findings and improve the ecological validity of our research.

The finding that participants believed that motivation to get pregnant with casual partners could drive condomless sex was surprising. Some of these motives may arise in relationships with casual partners with whom they want to develop a relationship. Indeed, we did not control for whether participants considered sex behaviors with one-night stands, casual sex relationships, friends with benefits, or any other type of casual (albeit regular) regular partner (Anders et al., 2020; Garcia et al., 2012; Luz et al., 2022). Hence, future research could examine in greater detail the role of pregnancy motives in the context of casual relationships. Moreover, despite some research indicating that people use protection with different hookup partners (Alvarez et al., 2021), hookups are driven by sexual pleasure and desire, among other motives, and often occur when people are under the influence of alcohol and other drugs (Weitbrecht & Whitton, 2020). Also, people are more likely to have condomless sex when partners are viewed as more trustworthy (Fortenberry, 2019; Rodrigues, 2022), more desirable, and less likely to have an STI (Collado et al., 2017), even if this is based more on beliefs than factual knowledge of STI status. Hence, future studies could examine if pleasure promotion people are particularly at risk of forgoing condom use when they know or feel comfortable with casual partners, whereas disease prevention people need signs of relationship commitment and monogamy before considering abandoning condoms. Future studies could also examine if health information and messages are received differently depending on regulatory focus. For instance, pleasure promotion (vs. disease prevention) people may be more attentive to sexual education curricula that have more integrated and hedonic (vs. mainly biological) approaches to sexuality (e.g., focusing on pleasure; Ford et al., 2021) and advertisements that use gain (vs. loss) frameworks (Mao et al., 2021), or even to different products aimed at enhancing pleasure (Gallo et al., 2022). Such a study could provide important insights into how to adjust health communication and improve its efficacy.

Conclusion

Our results show the importance of individual motives for sexual health and highlight the potential utility of adopting a regulatory focus framework to develop health messages, campaigns, and interventions to increase sexual health literacy and education. Our results showed that pleasure promotion people believed that being faced with an unpredictable situation, wanting to have more pleasure, and striving for intimacy are drivers of riskier sexual activities. Aligned with these findings, pleasure reduction was one of the attributes attached to condoms. Interestingly, pleasure promotion people considered that being aware of risks favors condom use, much like wanting to achieve more pleasure and maintain hygiene, which suggests a possible change in the condom narrative (e.g., as a pleasure tool). In contrast, disease prevention people highlighted the importance of sexual education and responsibility for condom use and ascribed more health-protective functions to condoms. They were more aware of risks, acknowledged the need to have control over condom use, and indicated the importance of being prepared beforehand. This duality between pleasure reduction and pleasure attainment may be a relevant course of action to change perceptions of condoms and improve their consistent use among pleasure promotion people while at the same time changing perceptions of pleasure to enhance sexual activity among disease prevention people. Only by addressing both motivations can we work to foster comprehensive sexual health for all (Ford et al., 2021; Gruskin & Kismödi, 2020; Gruskin et al., 2019).

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