



# Stigmatization of Consensual Non-Monogamous Partners: Perceived Endorsement of Conservation or Openness to Change Values Vary According to Personal Attitudes

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## Abstract

Studies have shown that romantic partners in consensual non-monogamous (CNM) relationships are targets of stigmatization. However, little is known about the underlying mechanisms and the conditions under which such stigmatization occurs. In two experimental studies (combined  $N = 772$ ), we asked participants to read the description of two partners in a relationship (monogamous vs. open relationship vs. polyamorous) and make a series of judgments about those partners. Overall results showed that CNM (vs. monogamous) partners were perceived as less trustworthy and as having more sexual health concerns (Studies 1 and 2), and as being less committed and less sexually satisfied (Study 2). Results from a conditional mediation analysis (Study 2) further showed that participants with negative attitudes toward consensual non-monogamy perceived CNM (vs. monogamous) partners as having less conservation and more openness to change values, which was then associated with more stigmatization. In contrast, participants with positive attitudes toward consensual non-monogamy perceived CNM (vs. monogamous) partners as having more openness to change values, which was then associated with less stigmatization. Taken together, these results extended the literature focused on prejudice, discrimination, and stigmatization of minority groups and highlighted key elements that can be used to buffer stigmatization.

**Keywords** Non-monogamy · Stigmatization · Attitudes · Values · Conservation · Openness to change

There has been a growing interest in consensual non-monogamy from researchers, therapists, educators, and the public (Balzarini & Muise, 2020; Cardoso et al., 2021). Consensual non-monogamy encompasses an array of relationship configurations whereby partners mutually consent to have sexual and/or emotional relationships with other individuals (Rubel & Bogaert, 2015). Studies with national samples in the USA (Hauptert et al., 2017a, 2017b; Levine et al., 2018) and Canada (Fairbrother et al., 2019) have shown that 12% of participants reported consensual non-monogamy as their ideal relationship configuration, more than 20% had previously engaged in a consensual non-monogamous (CNM) relationship, and up to 6% were in a CNM relationship at the time.

Even though these individuals tend to have similar experiences to those of their monogamous counterparts, they are

heavily stigmatized by others (Mogilski et al., 2021). Such experiences seem to originate in the perception that consensual non-monogamy departs from mononormativity (i.e., the premise that monogamy is the only valid relationship configuration; Conley et al., 2013; Hutzler et al., 2016), undermines monogamy (Mogilski et al., 2021), and is practiced by “inferior” people (Conley et al., 2013). For example, individuals tend to hold more negative beliefs about CNM partners (e.g., Burleigh et al., 2017; Grunt-Mejer & Campbell, 2016; Moors et al., 2013), are less willing to accept a CNM person in their close network (Balzarini et al., 2018), and are more likely to dehumanize CNM partners (Rodrigues et al., 2018). Despite the growing body of research documenting the stigmatization of consensual non-monogamy, there is a dearth of research examining *why* and *under which conditions* this phenomenon occurs. One exception is the study by Rodrigues and colleagues (2021b), in which the authors found that perceptions of morality and relationship commitment explained the dehumanization of CNM partners, but only when participants reported more negative attitudes toward consensual non-monogamy. Building upon these findings, in two experimental studies we examined if CNM (vs. monogamous) partners were

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perceived more negatively in personal attributes, sexual health behaviors, and relationship quality (Study 1), and if the attribution of different values to CNM (vs. monogamous) partners help to explain different stigmatization outcomes, depending on the attitudes toward consensual non-monogamy (Study 2). We believe that identifying which values are attributed to those in different relationship configurations can help understand the stigmatization of CNM individuals, suggest courses of action to advance education in consensual non-monogamy, and ultimately contribute to improving the quality of life of CNM individuals.

## The Experiences of CNM Individuals

Research has shown that CNM partners have a similar functioning in their relationships compared to monogamous partners, including relationship quality (e.g., commitment, happiness), perceived threats when agreed-upon boundaries are violated (e.g., jealousy), and reactions to break-up (Cohen, 2016a, 2016b; Conley et al., 2018; Lecuona et al., 2021; Mitchell et al., 2020; Mogilski et al., 2019, 2020; Morrison et al., 2013; Rodrigues et al., 2017, 2021a). Individuals who share a CNM agreement often report they benefit from having open communication with their partner(s), equity, trust, and honesty in their relationship(s), freedom to explore their sexuality, and increased sexual satisfaction (Barker, 2005; Brooks et al., 2021; Cohen, 2016a; Ho, 2006; Moors et al., 2015; Murphy et al., 2021). One of the correlates of having sexual freedom is being careful with sexual health, communicating about the risks of their sexual activity, using condoms frequently with their partner(s), and getting tested for sexually transmitted infections (STIs) on a regular basis (Conley et al., 2012; Lehmler, 2015; Rodrigues et al., 2019a, 2019c).

In sharp contrast with this empirical evidence, CNM individuals are heavily stigmatized, not only by others (Moors et al., 2013) but also in the eyes of experts (Grunt-Mejer & Chańska, 2020) and by society in general (Vaughan et al., 2019). For example, CNM individuals are perceived to have lower cognitive abilities, to be untrustworthy and unreliable, to have lower relationship quality, and to be more unfaithful (Conley et al., 2013; Grunt-Mejer & Campbell, 2016; Hutzler et al., 2016; Mitchell et al., 2020; Moors et al., 2013). Consensual non-monogamy is over-archingly perceived more negatively, although some level of variability between CNM configurations may exist. For example, polyamorous relationships are sometimes perceived more favorably than open or swinging relationships (Balzarini et al., 2018; Grunt-Mejer & Campbell, 2016; Matsick et al., 2014), arguably because polyamory partners are perceived to favor emotional connections over casual sex. As monogamy is perceived as one of the most effective strategies to prevent the spread of STIs (Conley & Piemonte, 2020; Conley et al., 2015), CNM

individuals are also perceived to be reckless with their sexual health when compared to monogamous individuals. For example, CNM individuals are perceived as more promiscuous and more likely to have an STI (Balzarini et al., 2018; Conley et al., 2013) but also more likely to use condoms (Moors et al., 2013). Although these results seem contradictory, individuals who regularly use condoms with their partners tend to be perceived as having a poorer relationship quality (Conley & Rabinowitz, 2009). Moreover, condoms are often ditched or switched to other contraceptive methods as the relationship becomes more serious and trustworthy (Civic, 2000; Critelli & Suire, 1998; He et al., 2016; Hock-Long et al., 2013; Manning et al., 2009; Wildsmith et al., 2015). Therefore, perceiving a higher frequency of condom use among CNM individuals can be a by-product of the negative appraisal of their relationships. Furthermore, researchers have found that CNM partners are also targets of dehumanization. Indeed, Rodrigues and colleagues (Rodrigues et al., 2018, 2021b) showed that romantic partners described as having a CNM (vs. monogamous) relationship were attributed fewer secondary and complex emotions that are uniquely human (e.g., compassion, embarrassment) and attributed more primary and basic emotions that are shared by humans and animals (e.g., anger, pleasure).

The stigma surrounding consensual non-monogamy mirrors to some extent the stereotypical views that individuals have about gay men and same-sex male relationships. There is ample research showing that gay men and heterosexual partners have similar relationship functioning (Chonody et al., 2020; Peplau & Fingerhut, 2007; Reczek, 2020; Rodrigues et al., 2019b). And yet, gay men (vs. heterosexual individuals) are perceived as more promiscuous, more likely to have riskier sexual behaviors and spread STIs (Rice et al., 2021), and less likely to have loving, fulfilling, and serious relationships (Brown & Groscup, 2009; Doan et al., 2015). Much like CNM partners, gay partners are often stigmatized because of their sexual orientation (Lopes et al., 2017; Peplau & Fingerhut, 2007), are targets of violence (Lund et al., 2021), are avoided by others (Buck et al., 2013; Cook & Cottrell, 2021), and are dehumanized (Fasoli et al., 2016). Given that gay, lesbian, and bisexual individuals are more likely to have a CNM relationship (Hauptert et al., 2017a, 2017b; Moors et al., 2017; Sizemore & Olmstead, 2018), same-sex CNM partners could be at even greater risk of stigmatization because they depart from mononormativity and heteronormativity. Against this hypothesis, Rodrigues and colleagues (2018) found that CNM partners were dehumanized to a similar extent, regardless of their sexual orientation (see also Moors et al., 2013). Notwithstanding, there is still a dearth of research examining if CNM partners are at risk of double stigmatization due to their sexual orientation.

## Mechanisms and Conditions of CNM Stigmatization

Individuals in CNM relationships may be stigmatized for different reasons and under distinct conditions. In their study, Rodrigues and colleagues (2021b) found that participants perceived CNM (vs. monogamous) partners as less moral and less committed to their relationship, which was then associated with a greater likelihood of dehumanization. Building upon these findings, we argue that the attribution of distinct basic values to CNM partners can have a determinant role in the perception and appraisal of such relationship configurations. Research framed by the Theory of Human Values (Schwartz, 1992, 1994) shows that individuals across cultures share 10 basic values that are grouped in four higher-order values: (a) conservation values entail motives to preserve the status quo and the certainty it provides, (b) self-enhancement values entail motives to improve oneself and one's interests, (c) openness to change values entail motives to promote personal autonomy and welcome change, new experiences, and ideas, and (d) self-transcendence values entail motives to go beyond self-interests and focus on the welfare of others (Schwartz & Boehnke, 2004). The importance attributed to these values shapes how individuals pursue and meet their biological, social, and survival needs and how they perceive others and behave toward them (Bardi & Schwartz, 2003; Boer & Fischer, 2013; Maio, 2016).

Specific values have been associated with increased or decreased stigmatization and prejudice toward certain outgroup members. For example, individuals who endorse conservation values tend to have more prejudice toward immigrants (Davidov et al., 2008; Falanga et al., 2015) and individuals from sexual minorities (Bacchini et al., 2021; Donaldson et al., 2017; Kuntz et al., 2015). They are less likely to engage with members of low-status groups (Sagiv & Schwartz, 1995) and have negative affective responses and judgment toward members of stigmatized groups (i.e., drug users; Skinner et al., 2007). Similarly, individuals who endorse more self-enhancement values tend to have more negative attitudes toward outgroups members, such as immigrants (Falanga et al., 2015; Saroglou et al., 2009) and individuals from sexual minorities (Bacchini et al., 2021; Donaldson et al., 2017). In contrast, individuals who endorse more openness to change values tend to have more positive attitudes and are more willing to have closer contact with members of stigmatized groups (Roccas & Amit, 2011; Sagiv & Schwartz, 1995; Schwartz et al., 2010). These individuals are also more supportive of equal rights for individuals from sexual minorities (Kuntz et al., 2015). Likewise, individuals who endorse more self-transcendence values tend to have more pro-social attitudes (Boer & Fischer, 2013), less prejudice toward immigrants (Davidov et al., 2008; Falanga et al., 2015; Roccas & Amit, 2011), and less homophobic attitudes (Bacchini et al., 2021).

Instead of examining the values individuals have and how these values determine the appraisal of others, we examined how attributing specific values to outgroup members can drive negative appraisals (see also Maio, 2016). For example, Wolf and colleagues (2019) found higher levels of prejudice among participants who perceived Muslim immigrants as endorsing more openness to change values. However, we must also consider that attitudes toward outgroup members can determine stigmatization (Ajzen & Cote, 2008; Pettigrew & Tropp, 2006). For example, people evaluate CNM individuals more favorably when they are more familiar with or know someone who identifies with consensual non-monogamy (Balzarini et al., 2018; Hutzler et al., 2016). Moreover, Rodrigues and colleagues (2021b) found that having more positive (vs. negative) attitudes toward consensual non-monogamy buffered the dehumanization of CNM partners. We argue that attributing distinct values (e.g., conservation vs. openness to change) to CNM partners can also drive their stigmatization. Still, this phenomenon may be conditioned by attitudes toward consensual non-monogamy. To the best of our knowledge, no research to date has examined this possibility.

## General Overview

We conducted two experimental studies to better understand why and under which conditions CNM partners are targets of stigmatization. Study 1 aimed to replicate and extend past studies (Balzarini et al., 2018; Conley et al., 2013; Rodrigues et al., 2018, 2021b) by examining if romantic partners who are described as having a CNM (vs. monogamous) relationship are also evaluated more negatively in perceived trustworthiness and concerns with sexual health. This study also examined if gay (vs. heterosexual) romantic partners were at higher risk of stigmatization when involved in a CNM (vs. monogamous) relationship. We decided to focus on the perception of gay partners for two main reasons. First, we wanted to replicate the results of the only study examining the intersection between consensual non-monogamy and sexual orientation stigmatization (Rodrigues et al., 2018). Second, gay men tend to be perceived as more promiscuous and to have poorer sexual health than lesbian women or heterosexual individuals (Rice et al., 2021) and can be at a higher risk of discrimination.

Study 2 further extended these evaluations to include perceived sexual satisfaction, morality, and commitment. Furthermore, this study aimed to examine if the attribution of specific basic values to romantic partners can help explain the stigmatization of CNM (vs. monogamous) partners. Lastly, this study examined if positive (vs. negative) attitudes toward consensual non-monogamy buffered CNM stigmatization. To rule out the potential effects of a priori demographic differences

in the stigmatization (or lack thereof) of non-normative individuals, we included demographic variables as covariates in our analyses.

## Study 1

We aimed to examine if romantic partners are perceived differently in their trustworthiness and sexual health concerns, depending on their relationship configuration (monogamous vs. open vs. polyamorous partners) and partners' sexual orientation (heterosexual vs. gay). Based on the negative halo around consensual non-monogamy (Balzarini et al., 2018; Conley et al., 2013), we expected participants to perceive monogamous partners as more trustworthy (H1) and as having less sexual health concerns, i.e., more likely to have STIs and to use condoms (H2), when compared to open and polyamorous partners.

As individuals perceive CNM relationship configurations differently (Balzarini et al., 2018; Grunt-Mejer & Campbell, 2016; Matsick et al., 2014; Moors et al., 2013), we also explored differences in the stigmatization of open and polyamorous partners. Lastly, we built upon the available studies examining how individuals perceive the relationships of gay partners in monogamous and CNM relationships (Conley et al., 2013; Rodrigues et al., 2018) and explored if the sexual orientation of both partners moderated any of our expected effects. We advanced no a priori hypotheses, given the lack of sound supporting evidence.

## Method

### Participants and Design

A total of 207 Portuguese individuals with ages between 19 and 65 years ( $M = 29.34$ ,  $SD = 10.21$ ) completed the online survey. Participants were mostly women (78.3%), heterosexual (87.4%), in a monogamous relationship (63.8%), lived in metropolitan areas (87.0%), and were university graduates (50.2%). Demographic characteristics are detailed in Table 1.

Participants were randomly assigned to a 3 (Relationship configuration: Monogamous vs. Open vs. Polyamorous)  $\times$  2 (Sexual orientation: Heterosexual vs. Gay partners) experimental design.

### Procedure

This study followed the ethical guidelines of Iscte-Instituto Universitário de Lisboa. We posted invitations on social media to an online survey about the perception of romantic relationships. After assessing the link provided in the posts, prospective participants were informed that they would read the description of two partners in a relationship and

**Table 1** Demographic characteristics for both studies

	Study 1		Study 2	
	<i>N</i>	<i>M</i> ( <i>SD</i> ) or %	<i>N</i>	<i>M</i> ( <i>SD</i> ) or %
Age	207	29.34 (10.21)	558	26.23 (11.41)
Gender				
Women	162	78.3	382	67.6
Men	45	21.7	180	31.9
Transgender	0	0	3	0.5
Sexual orientation				
Heterosexual	181	87.4	480	85.0
Lesbian/gay	17	8.2	19	3.4
Bisexual	8	3.9	50	8.8
Other (e.g., pansexual, asexual)	1	0.5	16	2.8
Relationship configuration				
Without a relationship	70	33.8	244	43.2
Monogamous relationship	132	63.8	300	53.1
Open relationship	2	1.0	12	2.1
Polyamorous relationship	3	1.4	9	1.6
Area of residence				
Urban area	180	87.0	448	79.3
Rural area	27	13.0	117	20.7
Education level				
High school	35	16.9	138	24.4
University	104	50.2	347	61.4
Postgraduate	68	32.9	80	14.2

then asked questions about these partners. They were also informed that participation was voluntary, that all responses were anonymous and confidential, and that they could abandon the survey without penalties, or their responses being recorded. After giving informed consent, participants were randomly assigned to one of the six conditions that defined the experimental design. Specifically, participants read one of the following descriptions: (a) “Nuno and Mariana are highly committed to each other in a long-term exclusive romantic relationship, that is, neither partner is allowed to have sex or romantic relationships with other individuals—a monogamous relationship” (*monogamous heterosexual partners condition*), (b) Nuno and Mariana are highly committed to each other in a long-term sexually non-exclusive romantic relationship, that is, each partner can only have sexual encounters, but not romantic relationships, with other individuals—an open relationship” (*open heterosexual partners condition*); (c) Nuno and Mariana are highly committed to each other in a long-term non-exclusive romantic relationship, that is, each partner can have sexual encounters and romantic relationships with other individuals—a polyamorous relationship” (*polyamorous heterosexual partners condition*); (d) Nuno and Mario are highly committed to each other in a long-term exclusive romantic relationship,



that is, neither partner is allowed to have sex or romantic relationships with other individuals—a monogamous relationship” (*monogamous gay partners condition*); (e) Nuno and Mario are highly committed to each other in a long-term non-exclusive romantic relationship, that is, each partner can only have sexual encounters, but not romantic relationships, with other individuals—an open relationship” (*open gay partners condition*); and (f) Nuno and Mario are highly committed to each other in a long-term non-exclusive romantic relationship, that is, each partner can have sexual encounters and romantic relationships with other individuals—a polyamorous relationship” (*polyamorous gay partners condition*). After reading the description, participants were asked to complete the dependent measures and provided standard demographic information. At the end of the survey, participants were thanked, debriefed about the study, and provided with the contact of the main researcher.

## Measures

### Perceived Trustworthiness

Based on past research (Balzarini et al., 2018), we asked participants, “In general, how much do you think both partners are honest?”, “In general, how much do you think both partners are sincere?” and “In general, how much do you think both partners are reliable?”. Responses were given in 7-point scales (from 1 = *Not at all* to 7 = *Extremely*). Items were mean aggregated ( $\omega = .85$ ), with higher scores indicating more perceived trustworthiness.

### Perceived Sexual Health Concerns

Based on past research (Balzarini et al., 2018), we asked participants, “In general, how likely do you think both partners are to have a sexually transmitted infection (STI)?” and “In general, how likely do you think both partners are to use condoms when having sex to each other?”. Responses were given in 7-point scales (from 1 = *Not at all* to 7 = *Extremely*). Items were not significantly correlated,  $r(207) = .12$ ,  $p = .077$ , and were examined separately in our analyses. Higher scores indicate more perceived sexual health concerns.

### Analytic Plan

Our hypotheses were tested in three separate 3 (Relationship configuration)  $\times$  2 (Sexual orientation) ANCOVAs using SPSS, controlling for all demographic variables. When differences were found, we additionally computed post hoc comparisons with Bonferroni correction. A sensitivity power analysis using

G\*Power (Faul et al., 2009) indicated that we had 95% power to detect an effect size of  $\eta_p^2 = .060$ . The database and complete syntaxes for these analyses are available on our Open Science Framework page (see OSF).

## Results

### Stigmatization of CNM Partners

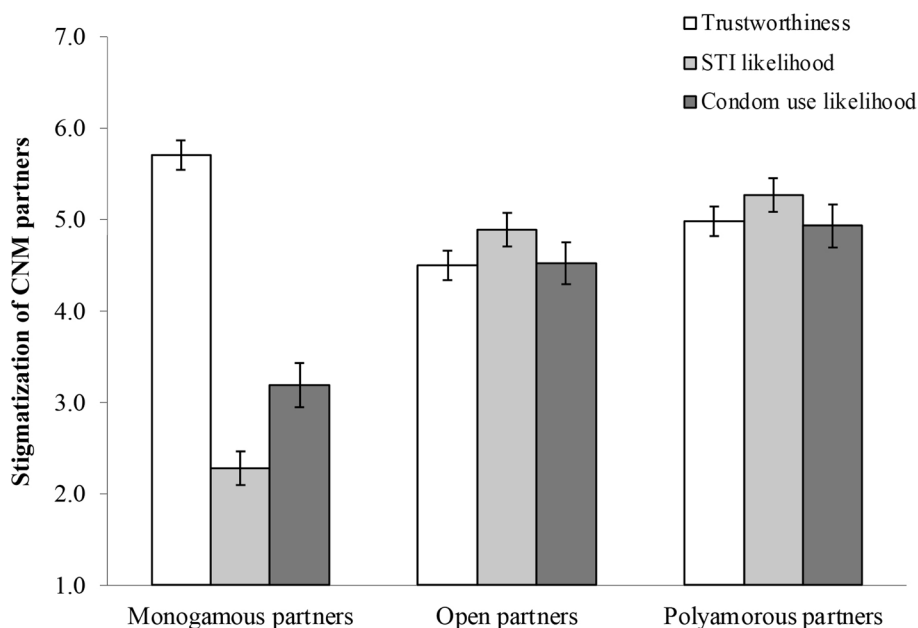
Results showed a main effect of relationship configuration on perceived trustworthiness,  $F(2, 195) = 14.79$ ,  $p < .001$ ,  $\eta_p^2 = .132$ . Neither the main effect of sexual orientation,  $F(1, 195) = 0.04$ ,  $p = .841$ ,  $\eta_p^2 = .000$ , nor the interaction between factors were significant,  $F(2, 195) = 0.33$ ,  $p = .716$ ,  $\eta_p^2 = .003$ . We also found a main effect of relationship configuration on perceived STI likelihood,  $F(2, 195) = 80.66$ ,  $p < .001$ ,  $\eta_p^2 = .453$ , and not a main effect of sexual orientation,  $F(1, 195) = 0.87$ ,  $p = .351$ ,  $\eta_p^2 = .004$ , nor a significant interaction between factors,  $F(2, 195) = 1.04$ ,  $p = .356$ ,  $\eta_p^2 = .011$ . Lastly, results showed a main effect of relationship configuration on perceived condom use likelihood,  $F(2, 195) = 14.73$ ,  $p < .001$ ,  $\eta_p^2 = .131$ , but neither the main effect of sexual orientation,  $F(1, 195) = 1.97$ ,  $p = .162$ ,  $\eta_p^2 = .010$ , nor the interaction between factors reached significance,  $F(2, 195) = 0.39$ ,  $p = .680$ ,  $\eta_p^2 = .004$ .

Estimated marginal means for each relationship configuration, collapsed by sexual orientation, are depicted in Fig. 1. As expected, post hoc comparisons showed that monogamous partners were perceived as more trustworthy, less likely to have STIs, and less likely to use condoms than open or polyamorous partners, all  $p \leq .005$ . No differences were found between both CNM groups, all  $p \geq .669$  (for detailed descriptive information and comparisons, see Supplemental Materials, S1).

## Discussion

This study provided additional support for the negative halo around consensual non-monogamy by showing that CNM partners—described as having an open or a polyamorous relationship—were also negatively appraised in their trustworthiness and sexual health. Our results also showed that stigmatization occurred regardless of the sexual orientation of both partners, aligned with past findings (Rodrigues et al., 2018). In Study 2, we examined if CNM stigmatization could be explained by the attribution of specific basic values to CNM (vs. monogamous) partners and whether this phenomenon depends on the attitudes participants hold toward consensual non-monogamy.

**Fig. 1** Estimated marginal means for perceived trustworthiness and sexual health concerns (Study 1). Error bars indicate standard errors



## Study 2

Extending our previous study, we examined if romantic partners are perceived differently in perceived trustworthiness, morality, sexual health concerns, and relationship quality, depending on their relationship configuration (monogamous vs. open vs. polyamorous partners). Based on the findings from Study 1 and past research (Balzarini et al., 2018; Conley et al., 2013; Rodrigues et al., 2018, 2021b), we expected participants to perceive monogamous partners as more trustworthy (H1a), having fewer sexual concerns (H1b), more moral (H1c), more committed (H1d), and more sexually satisfied (H1e), when compared to open and polyamorous partners.

Framed by the Theory of Human Values (Schwartz, 1992, 1994), and based on research examining the link between basic values and stigmatization (Davidov et al., 2008; Falanga et al., 2015; Roccas & Amit, 2011; Sagiv & Schwartz, 1995), we also expected participants to perceive monogamous (vs. open and polyamorous) as endorsing more conservation (H2a) and self-transcendence (H2b) values. In contrast, we expected participants to perceive open and polyamorous (vs. monogamous) partners as endorsing more openness to change (H3a) and more self-enhancement (H3b) values.

As specific basic values can help explain negative appraisals of outgroup members (Maio, 2016; Wolf et al., 2019), we expected that perceived lack of endorsement in specific values by CNM partners—specifically conservation and self-transcendence—would explain the stigmatization of these romantic partners (i.e., mediate, H4). Lastly, and given that stigmatization of CNM partners is buffered by holding positive attitudes toward consensual

non-monogamy (Balzarini et al., 2018; Hutzler et al., 2016; Rodrigues et al., 2021b), the expected mediation should be observed particularly among participants with negative (vs. positive) attitudes toward consensual non-monogamy (i.e., conditional mediation, H5).

## Method

### Participants and Design

A total of 565 individuals with ages between 18 and 78 years ( $M = 26.23$ ,  $SD = 11.41$ ) completed the online survey. Participants were mostly women (67.6%), heterosexual (85.0%), in a monogamous relationship (53.1%), lived in metropolitan areas (79.3%), and were university graduates (61.4%). Demographic characteristics are detailed in Table 1.

Participants were randomly assigned to a 3 (Relationship configuration: Monogamous vs. Open vs. Polyamorous) experimental design.

### Procedure

Materials and measures for this study were the same as in Study 1, with two exceptions. First, participants were randomly assigned to one of the three conditions that defined the experimental design: (a) “Nuno and Mariana are highly committed to each other in a long-term exclusive romantic relationship, that is, neither partner is allowed to have sex or romantic relationships with other individuals—a monogamous relationship” (*monogamous partners*

*condition*), (b) Nuno and Mariana are highly committed to each other in a long-term sexually non-exclusive romantic relationship, that is, each partner can only have sexual encounters, but not romantic relationships, with other individuals—an open relationship” (*open partners conditions*); (c) Nuno and Mariana are highly committed to each other in a long-term non-exclusive romantic relationship, that is, each partner can have sexual encounters and romantic relationships with other individuals—a polyamorous relationship” (*polyamorous partners conditions*). Second, we added some dependent variables in addition to the previously used measures of perceived trustworthiness—three items that were mean aggregated ( $\omega = .88$ )—and sexual health concerns—two items examined separately, albeit significantly correlated,  $r(565) = .15, p = .001$ .

## Measures

### Perceived Promiscuity and Morality

Based on past research (Rodrigues et al., 2021b), we asked participants, “In general, how much do you think both partners are promiscuous?” and “In general, how much do you think both partners have morals?”. Responses were given in 7-point scales (from 1 = *Not at all* to 7 = *Extremely*). Items were examined separately, despite significantly correlated,  $r(565) = -.24, p < .001$ .

### Perceived Commitment and Sexual Satisfaction

Also, based on past research (Rodrigues et al., 2021b), we asked participants, “In general, how likely do you think both partners are to be committed to one another?” and “In general, how likely do you think both partners are to be sexually satisfied with one another?”. Responses were given in 7-point scales (from 1 = *Not at all* to 7 = *Extremely*). Again, we conducted separate analyses because both refer to distinct constructs (Hassebrauck & Fehr, 2002; Sprecher, 2002), despite being significantly correlated,  $r(565) = .61, p < .001$ .

### Endorsement of Basic Values

We used the Ten Item Values Inventory (TIVI) originally developed by (Sandy et al., 2017) to measure the basic human values proposed by (Schwartz, 1992, 1994). We adapted the TIVI instructions so that participants were asked to indicate the extent to which partners in the relationship shared each value (e.g., “Both members of the couple like to take risks. They are always looking for adventures”). Responses were given in 7-point rating scales (from 1 = *Not at all* to 7 = *Very much*).

Based on the higher-order values proposed in Schwartz and Boehnke (2004), we computed average scores indicating higher perceived endorsement in conservation values (i.e., security, tradition, and conformity;  $\omega = .71$ ), self-enhancement (i.e., achievement and power),  $r(565) = .46, p < .001$ , self-transcendence values (i.e., universalism and benevolence),  $r(565) = .65, p < .001$ , and openness to change values (i.e., stimulation and self-direction),  $r(565) = .68, p < .001$ . As the hedonism value is shared by both self-enhancement and openness to change higher-order values, we discarded this item from our analyses.

### Attitudes Toward Consensual Non-Monogamy

We asked participants “What is your attitude toward romantic relationships in which both partners can have sexual encounters, but not romantic relationships, with other individuals (i.e., an open relationship)?” and “What is your attitude toward romantic relationships in which both partners can have sexual encounters and romantic relationships with other individuals (i.e., a polyamorous relationship)?”. Responses were given in 7-point scales (from 1 = *Not at all favorable* to 7 = *Very favorable*). We mean aggregated both items,  $r(565) = .93, p < .001$ , with higher scores indicating positive attitudes toward consensual non-monogamy.

### Analytic Plan

Our hypotheses were tested in separate ANCOVAs using SPSS, controlling for all demographic variables. When differences were found, we additionally computed post hoc comparisons with Bonferroni corrections. We also tested five conditional mediation models using the PROCESS macro (Model 58), one for each dependent variable (for details, see Hayes, 2017). In all models, the experimental condition was the predictor variable, second-order basic values were the parallel mediators, attitudes toward consensual non-monogamy were the moderator variable, and demographic variables were covariates. Variables were mean centered for the calculation of interaction terms. When significant interactions were found, we then tested simple slopes by examining effects for participants holding negative ( $-1 SD$ ) and positive ( $+1 SD$ ) attitudes toward consensual non-monogamy. A sensitivity power analysis using G\*Power (Faul et al., 2009) indicated that we had 95% power to detect an effect size of  $\eta_p^2 = .027$ . The database and complete syntaxes for these analyses are available on our Open Science Framework page (see OSF).

## Results

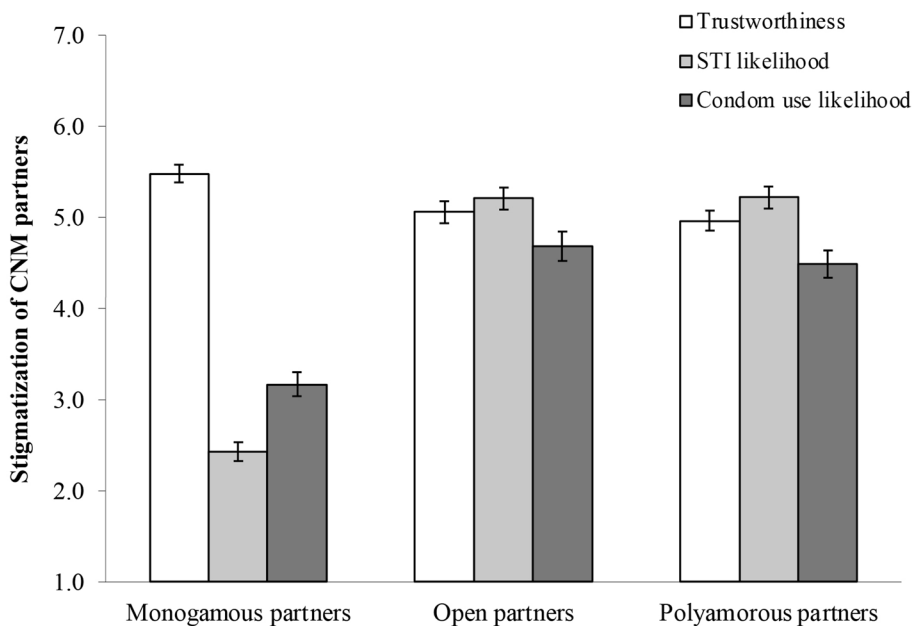
### Stigmatization of CNM Partners

Results showed a main effect of relationship configuration on perceived trustworthiness,  $F(2, 549) = 7.20, p < .001, \eta_p^2 = .026$ , perceived STI likelihood,  $F(2, 549) = 227.04, p < .001, \eta_p^2 = .453$ , perceived condom use likelihood,  $F(2, 549) = 36.95, p < .001, \eta_p^2 = .119$ , perceived promiscuity,  $F(2, 549) = 7.20, p < .001, \eta_p^2 = .026$ , perceived morality,  $F(2, 549) = 38.19,$

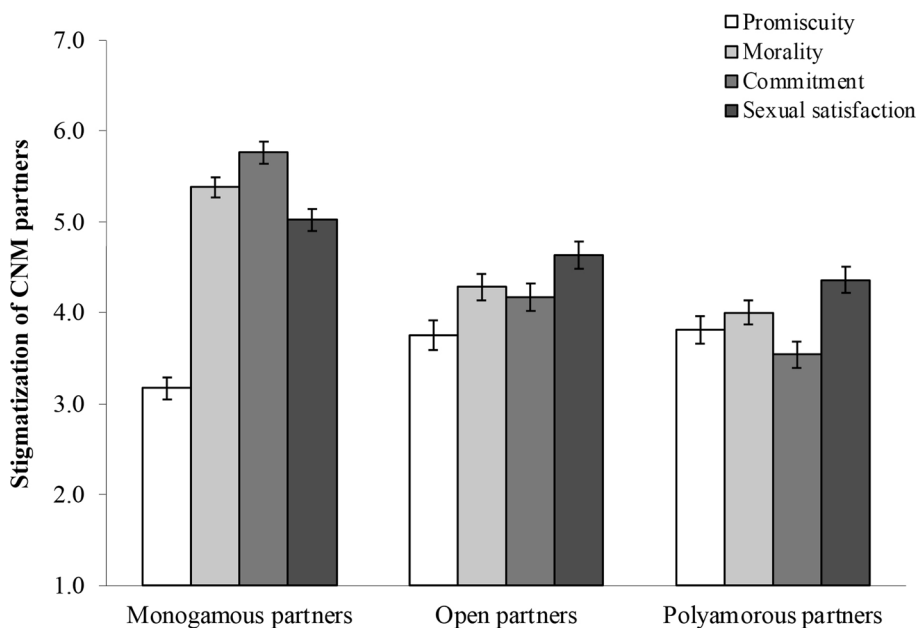
$p < .001, \eta_p^2 = .122$ , perceived commitment,  $F(2, 549) = 85.11, p < .001, \eta_p^2 = .237$ , and perceived sexual satisfaction,  $F(2, 549) = 6.84, p = .001, \eta_p^2 = .024$ .

Estimated marginal means are depicted in Figs. 2 and 3. As expected, post hoc comparisons showed that monogamous partners were perceived as more trustworthy, less likely to have STIs, less likely to use condoms, more moral, and more committed than open or polyamorous partners, all  $p \leq .019$ . Unexpectedly, post hoc comparisons also showed that monogamous partners were perceived as equally sexually satisfied as open partners,  $p = .119$ , but more so than polyamorous partners,

**Fig. 2** Estimated marginal means for perceived trustworthiness and sexual health concerns (Study 2). Error bars indicate standard errors



**Fig. 3** Estimated marginal means for perceived promiscuity, morality, commitment, and sexual satisfaction (Study 2). Error bars indicate standard errors





$p < .001$ . No differences emerged between both CNM groups in all measures, all  $p \geq .417$ , with the exception that open partners were perceived as more committed than polyamorous partners,  $p = .005$  (for detailed descriptive information and comparisons, see Supplemental Materials, S2).

### Perceived Endorsement in Basic Values

Results showed a main effect of relationship configuration on conservation,  $F(2, 549) = 15.99, p < .001, \eta_p^2 = .055$ , and openness to change values,  $F(2, 549) = 117.35, p < .001, \eta_p^2 = .299$ . No main effect emerged for self-enhancement,  $F(2, 549) = 0.35, p = .702, \eta_p^2 = .001$ , or self-transcendence values,  $F(2, 549) = 2.71, p = .068, \eta_p^2 = .010$ .

Estimated marginal means are depicted in Fig. 4. As expected, monogamous partners were perceived to endorse more conservation values than open partners or polyamorous partners, both  $p < .001$ . In contrast, open and polyamorous partners were perceived to endorse more openness to change values than monogamous partners, both  $p < .001$ . No other post hoc comparisons reached significance, all  $p \geq .069$  (for detailed descriptive information and comparisons, see Supplemental Materials, S3).

### Conditional Mediation Analyses

Overall, participants reported neutral attitudes toward consensual non-monogamy ( $M = 4.32, SE = 0.09, 95\% CI [4.14; 4.50]$ ) and no differences emerged between the experimental conditions,  $F(2, 549) = 0.40, p = .673, \eta_p^2 = .001$ . Based on the results from our previous analyses, we recategorized our predictor variable and aggregated both open and polyamorous groups,

and considered only conservation and openness to change values in this analysis.

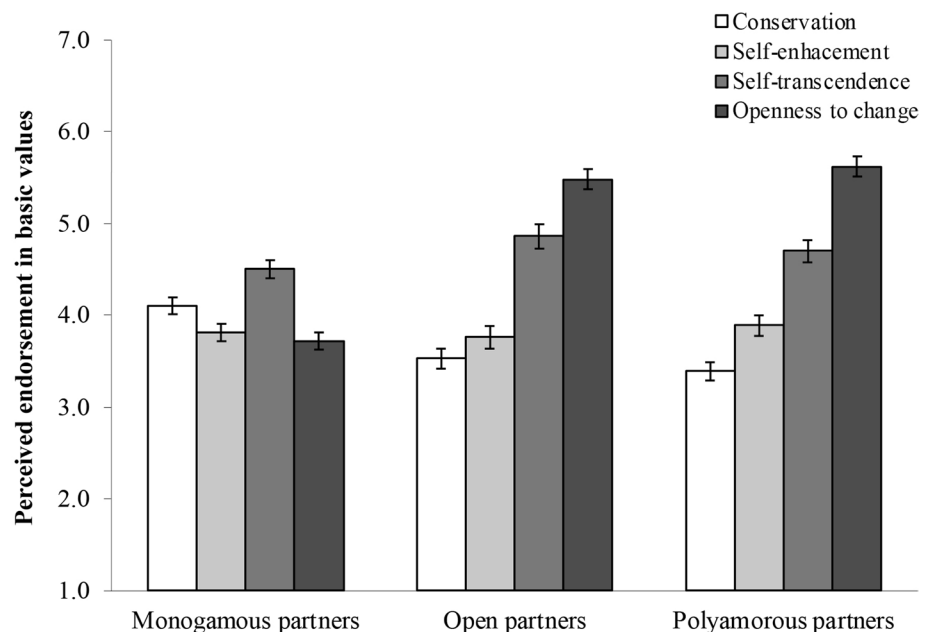
As shown in Table 2, there was an interaction between the experimental condition and attitudes toward consensual non-monogamy only in the attribution of conservation values,  $p < .001$ . Specifically, CNM partners were perceived as endorsing fewer conservation values by participants with negative attitudes ( $-1 SD$ ),  $p < .001$ , but not by participants with positive attitudes ( $+1 SD$ ),  $p = .999$  (see Fig. 5).

There were also interactions between both values and attitudes toward consensual non-monogamy in all evaluations, all  $p \leq .006$ . The only exceptions were the interactions for conservation values in perceived condom use likelihood,  $p = .118$ , and for both values in perceived promiscuity, both  $p \geq .131$ . As expected, attributing less conservation and more openness to change values to CNM (vs. monogamous) partners was associated with more overall CNM stigmatization for participants with negative attitudes toward consensual non-monogamy ( $-1 SD$ ), all  $p \leq .003$  (see upper panel on Fig. 6). In contrast, attributing more openness to change values to CNM (vs. monogamous) partners was associated with less overall CNM stigmatization for those with positive attitudes toward consensual non-monogamy ( $+1 SD$ ), all  $p \leq .007$  (see lower panel on Fig. 6). Conditional indirect effects further supported these findings.

### Discussion

This study replicated and extended the findings from Study 1. Specifically, we found additional evidence of the negative halo around consensual non-monogamy—regardless of relationship

**Fig. 4** Estimated marginal means for perceived endorsement in basic values (Study 2). Error bars indicate standard errors



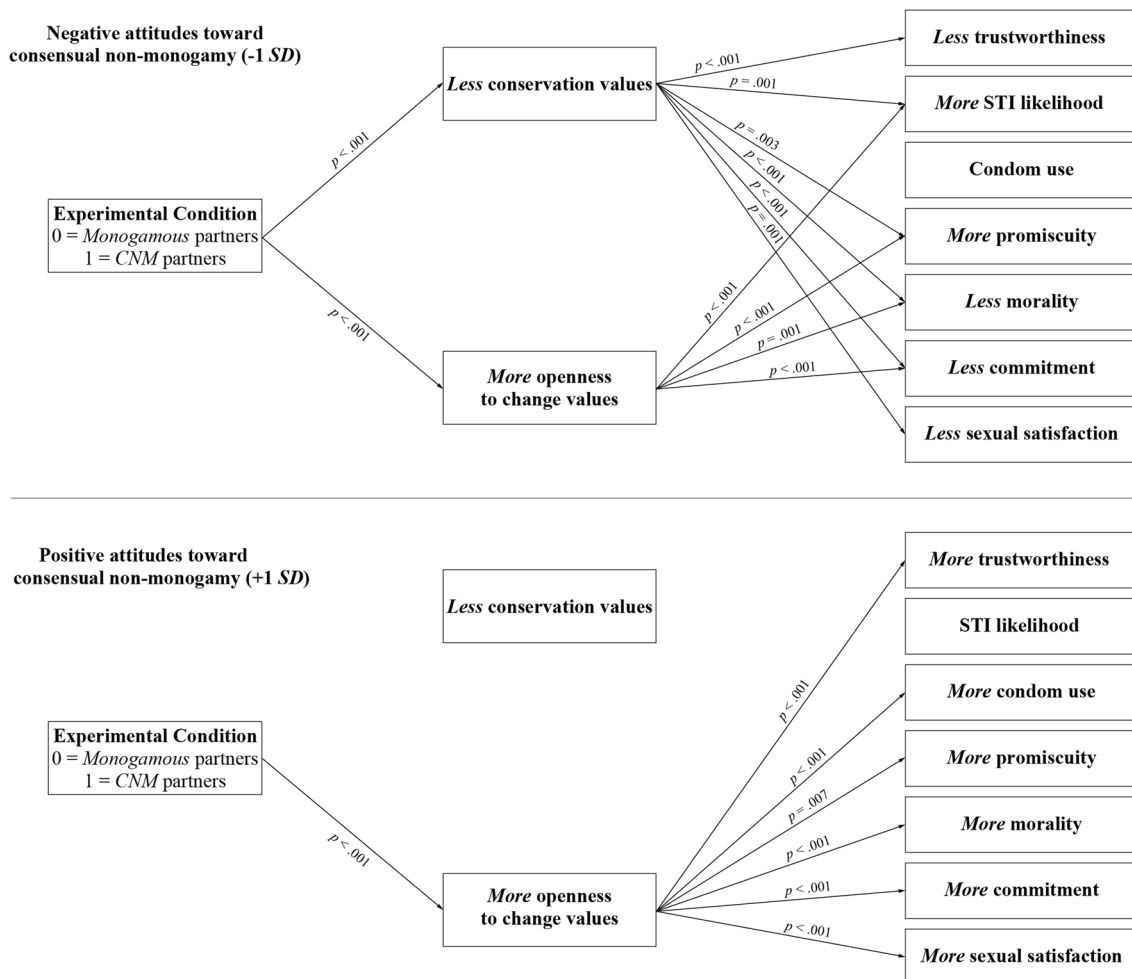
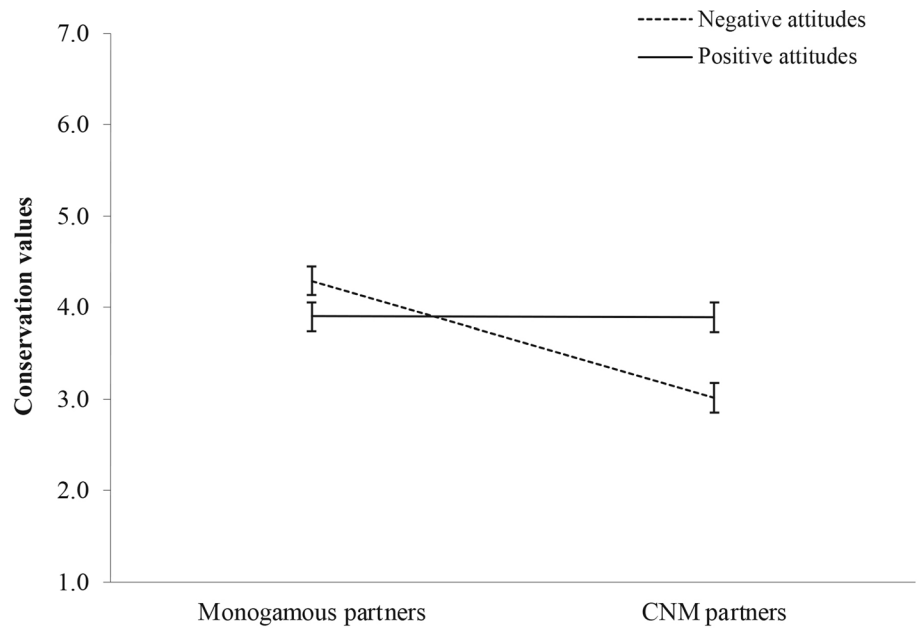
**Table 2** Results of the conditional mediation analyses (Study 2)

	Parallel mediators		Outcome variables						
	M1	M2	Trustworthiness	STI likelihood	Condom use likelihood	Promiscuity	Morality	Commitment	Sexual satisfaction
	<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )		<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )	<i>b</i> ( <i>SE</i> )
X: Experimental condition	−0.64*** (.11)	1.83*** (.12)	−0.45*** (.14)	2.45*** (.16)	1.04*** (.21)	0.00 (.20)	−1.13*** (.16)	−1.69*** (.17)	−0.68*** (.18)
M1: Conservation values	–	–	0.21*** (.04)	−0.12* (.05)	0.02 (.06)	−0.15* (.06)	0.28*** (.05)	0.15** (.05)	0.05 (.06)
M2: Openness to change values	–	–	0.12** (.04)	0.09* (.05)	0.24*** (.06)	0.25*** (.06)	0.09* (.05)	0.01 (.05)	0.17** (.05)
W: Attitudes	0.08** (.03)	0.02 (.03)	0.17*** (.03)	−0.16*** (.03)	0.07* (.04)	−0.21*** (.04)	0.23*** (.03)	0.29*** (.03)	0.29*** (.03)
X x W	0.29*** (.05)	−0.00 (.06)	–	–	–	–	–	–	–
Negative attitudes (−1 SD)	−1.28*** (.16)	–	–	–	–	–	–	–	–
Positive attitudes (+1 SD)	0.00 (.16)	–	–	–	–	–	–	–	–
M1 x W	–	–	−0.08*** (.02)	0.06** (.02)	−0.04 (.03)	0.04 (.02)	−0.07*** (.02)	−0.11*** (.02)	−0.09*** (.02)
Negative attitudes (−1 SD)	–	–	0.38*** (.06)	−0.24*** (.06)	–	–	0.44*** (.06)	0.39*** (.07)	0.23*** (.07)
Positive attitudes (+1 SD)	–	–	0.03 (.06)	0.01 (.07)	–	–	0.13 (.07)	−0.10 (.07)	−0.14 (.08)
M2 x W	–	–	0.09*** (.01)	−0.05*** (.02)	0.06* (.02)	−0.02 (.02)	0.13*** (.02)	0.11*** (.02)	0.10*** (.02)
Negative attitudes (−1 SD)	–	–	−0.07 (.05)	0.19*** (.19)	0.11 (.07)	–	−0.18*** (.06)	−0.23*** (.06)	−0.04 (.06)
Positive attitudes (+1 SD)	–	–	0.33*** (.05)	−0.00 (.06)	0.37*** (.08)	–	0.37*** (.06)	0.25*** (.07)	0.37*** (.07)
Indirect effects			<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]	<i>b</i> ( <i>SE</i> ) [95% CI]
<i>Conservation values</i>									
Negative attitudes (−1 SD)			−0.48 (.11) [−0.72; −0.28]	0.31 (.10) [0.13; 0.52]	−0.13 (.12) [−0.38; 0.09]	0.30 (.12) [0.09; 0.54]	−0.56 (.12) [−0.80; −0.34]	−0.50 (.12) [−0.74; −0.29]	−0.29 (.11) [−0.53; −0.09]
Positive attitudes (+1 SD)			0.00 (.01) [−0.03; 0.02]	0.00 (.01) [−0.03; 0.03]	0.00 (.02) [−0.03; 0.05]	0.00 (.02) [−0.04; 0.05]	0.00 (.02) [−0.05; 0.05]	0.00 (.02) [−0.04; 0.04]	0.00 (.03) [−0.05; 0.05]
<i>Openness to change values</i>									
Negative attitudes (−1 SD)			−0.14 (.11) [−0.37; 0.06]	0.35 (.12) [0.14; 0.60]	0.21 (.14) [−0.08; 0.49]	0.54 (.16) [0.24; 0.87]	−0.33 (.12) [−0.58; −0.12]	−0.42 (.13) [−0.71; −0.18]	−0.08 (.13) [−0.35; 0.17]
Positive attitudes (+1 SD)			0.59 (.12) [0.37; 0.85]	−0.01 (.12) [−0.23; 0.23]	0.67 (.17) [0.35; 1.03]	0.37 (.15) [0.09; 0.67]	0.67 (.14) [0.42; 0.96]	0.46 (.13) [0.21; 0.73]	0.68 (.15) [0.41; 0.99]

Experimental condition reflects the relationship configuration presented to participants (0=monogamous partners, 1=CNM partners). Attitudes = attitudes toward consensual non-monogamy. *b* unstandardized regression coefficients, *CI* confidence interval. For sake of clarity, results for covariates are not shown in this table

\*  $p \leq .050$ ; \*\*  $p \leq .010$ ; \*\*\*  $p \leq .010$

**Fig. 5** Interaction between the experimental condition and attitudes toward consensual non-monogamy for perceived endorsement on conservation values (Study 2). Error bars indicate standard errors



**Fig. 6** Significant results of the mediation analyses for participants with negative (upper panel) and positive (lower panel) attitudes toward consensual non-monogamy (Study 2)

configuration—for trustworthiness, sexual health, morality, and relationship quality. Notably, we also found that CNM stigmatization was heightened by the attribution of less conservation and more openness to change values among participants with negative attitudes toward consensual non-monogamy. In contrast, CNM stigmatization was buffered through the attribution of more openness to change values among participants with positive attitudes toward consensual non-monogamy.

## General Discussion

Taken together, our findings are aligned with a growing body of research documenting the enduring stigma surrounding CNM individuals and contribute to better understanding the stigmatization of CNM individuals in several, and often unrelated, attributes. Our studies also offered novel evidence by highlighting for the first time the role of basic values explaining *why* CNM partners are stigmatized, and *under which conditions* this phenomenon seems to occur. Specifically, perceiving CNM partners as less conservative and more open to change while holding *negative* attitudes toward consensual non-monogamy can lead to more stigma. However, perceiving CNM partners as more open to change while holding *positive* attitudes toward consensual non-monogamy can lead to less stigma.

Both studies found that CNM partners were consistently perceived as less trustworthy, less moral, less committed, and less sexually satisfied than monogamous partners. These results align with and replicate previous studies, suggesting that CNM partners are deemed more promiscuous, more likely to spread STIs, less committed, and less honest (Balzarini et al., 2018; Conley et al., 2013; Hutzler et al., 2016; Moors et al., 2013). The findings that CNM partners also had more sexual health concerns—including more likely to use condoms—than monogamous partners can also be explained by the negative appraisal of these individuals, namely that CNM partners have dishonest and uncommitted romantic relationships (Conley & Rabinowitz, 2009; Wildsmith et al., 2015). The stigma attached to consensual non-monogamy seems to persist despite the consistent evidence suggesting CNM and monogamous partners have similar relationship functioning, such as experiencing similar levels of satisfaction, commitment, and even jealousy (Lecuona et al., 2021; Mitchell et al., 2020; Mogilski et al., 2019; Rodrigues et al., 2017, 2021a; Rubel & Bogaert, 2015). Taken together, our studies provide further evidence of the negative halo surrounding consensual non-monogamy and that CNM relationships are, for the most part, stigmatized to a similar extent.

Results from Study 1 also showed that stigmatization occurred regardless of the sexual orientation of both CNM partners. This converges with previous research suggesting that individuals who depart from mononormativity may be less socially accepted and therefore at greater risk of stigmatization

(Moors et al., 2013) and dehumanization (Rodrigues et al., 2018), even when compared to individuals who depart from heteronormativity. Indeed, even though gay men and same-sex male partners are targets of prejudice and discrimination (Brown & Groscup, 2009; Doan et al., 2015; Rice et al., 2021), acceptance toward sexual minorities has increased in the past few years in some parts of the world (Pew Research Center, 2020). For example, attitudes toward gay and lesbian individuals in Portugal have become more favorable in recent years, particularly after the legalization of same-sex marriage in 2010 (Hagen & Goldmann, 2020). Since consensual non-monogamy lacks the awareness, legal recognition, and protection of same-sex (monogamous) partners in most countries, it could potentially explain why individuals are likely to stigmatize and hold negative attitudes toward CNM partners, regardless of their sexual orientation.

Results from Study 2 showed that CNM partners were more likely to be stigmatized when they were perceived to endorse fewer conservation values and more openness to change values, but only when participants reported negative attitudes toward them. These findings converge with the argument that stigmatization and prejudice against particular groups could be partially explained by attributing them with specific values, mainly if those values differ from one's own (Maio, 2016; Wolf et al., 2019). Arguably, our participants—who identified themselves as monogamous—endorsed conservation over openness to change values to themselves, perceiving monogamous partners as sharing their normative values and CNM partners as having values that challenge such norms. As a result, they could have perceived monogamous partners as part of their group. In contrast, CNM partners were perceived as outgroup members whose relationships go against the conformity, tradition, and security attached to monogamy, and therefore stigmatized. Hence, our findings resonate with research showing that higher endorsement in conservation values is associated with more stigmatization of outgroup members and minorities (Davidov et al., 2008; Donaldson et al., 2017; Falanga et al., 2015; Kuntz et al., 2015; Skinner et al., 2007). Our findings also resonate with research showing that prejudice and dehumanization increase when ingroup members perceive that the values of outgroup members are not aligned with their own (Dunbar et al., 2000; Greenhalgh & Watt, 2015; Wolf et al., 2019). However, a different picture emerged for participants with positive attitudes toward consensual non-monogamy, such that stigmatization was buffered because CNM partners were perceived to be more open to change. These findings corroborate previous research on discrimination (Ajzen & Cote, 2008; Pettigrew & Tropp, 2006) and consensual non-monogamy (Balzarini et al., 2018b; Hutzler et al., 2016; Rodrigues et al., 2021b). It also suggests that positive attitudes toward a given minority group can increase positive emotions and decrease negative ones (e.g., Finlay & Stephan, 2000; Vezzali et al., 2010), promoting acceptance of minority group members. This being the case,

positive attitudes toward consensual non-monogamy may promote more understanding for the motives and values endorsed by CNM partners, more favorable social perceptions, less prejudice associated with perceived value dissimilarity, and fewer appraisals determined by a mere dichotomy of who adheres to social norms and who departs from those norms.

## Limitations and Future Studies

The present study had some limitations that must be acknowledged. First, in Study 1 we focused only on the perceptions of gay romantic partners, and generalizations to individuals with other sexual identities should be taken with caution. Future studies could seek to replicate and expand our current findings by including distinct gender identities and sexual orientations (e.g., lesbian women, bisexual people, transgender people). Second, we did not find systematic differences in the perception of open and polyamorous partners or partners according to their sexual orientation. And yet, generalization must be taken with caution. For example, CNM configurations tend to be negatively appraised compared to monogamy, but individuals who practice swinging tend to be the most negatively appraised group (Balzarini et al., 2018; Grunt-Mejer & Campbell, 2016; Matsick et al., 2014). Second, we collected data in a cultural context where consensual non-monogamy is met with negativity and is not discussed at a societal level (e.g., Cardoso et al., 2021). Future studies should extend these findings by having a broader understanding of distinct relationship configurations and comparing findings from different cultural contexts.

Moreover, we did not assess the values endorsed by participants but rather their attitudes toward consensual non-monogamy. Hence, we could only speculate about the possibility that stigmatization rests on the dissimilarity between the values attributed to oneself and the values perceived to be endorsed by CNM partners members. Notwithstanding, our findings converge with findings reported by Wolf and colleagues (2019) in the field of value dissimilarity and prejudice. Future studies should seek to replicate and extend our findings by examining value dissimilarity between the values both monogamous and CNM participants attribute to themselves and the values they both attribute to outgroup members. Comparing both sides of the groups would provide richer and more detailed information regarding the stigmatization of CNM individuals and how these individuals perceive such stigmatization themselves. For example, it would be interesting to understand if the stigmatization of individuals who depart from mononormativity is explained by value dissimilarity, or if stigmatization simply occurs because these individuals are more motivated to question norms and embrace change. Taking a step further, research should also seek to compare the foreseen implications of stigmatization among monogamous participants with the actual experiences of stigmatization reported by CNM participants. This would likely

provide researchers and professionals with valuable insights on how to counteract stigmatization and develop more inclusive and sex-positive sexual education practices.

## Conclusion

This study extended our understanding of the stigma against consensual non-monogamy. Among individuals with less favorable views toward consensual non-monogamy, perceiving CNM partners as less conservative and more open to change was associated with more stigmatization. However, having positive attitudes toward consensual non-monogamy was associated with the perception of CNM partners as more open to change, which buffered stigmatization. Continuing to reinforce the current negative attitudes toward consensual non-monogamy while intervening with or making policies for CNM partners can set these individuals up for failure and further stigmatization. However, exposing people to exemplars of CNM individuals and relationships, developing a more inclusive and diverse discourse around consensual non-monogamy, and striving to change attitudes can have positive benefits overall. Hence, our findings can help inform the development of new theoretical frameworks, evidence-based awareness campaigns, more adjusted clinical practices, and more inclusive social policies to improve sexual education and the quality of life of those who identify as CNM.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10508-022-02368-7>.

**Authors' Contributions** DLR conceived and coordinated the study, performed the measurement and statistical analysis, interpreted the data, and drafted the manuscript; GAC helped with statistical analysis and with writing the draft; DL reviewed the draft. All authors read and approved the final manuscript.

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**Availability of Data and Material** All data and syntaxes that support the findings of this study are available on the Open Science Framework (OSF), and all materials are available on request from the corresponding author.

**Code Availability** Not applicable.

## Declarations

**Conflicts of interest** Not applicable.



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