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## Exploring How Communal Motivations and Gender Norms Predict Sexual Health Practices

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# *Exploring How Communal Motivations and Gender Norms Predict Sexual Health Practices*

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## **Abstract**

In the U.S., one in four women under 20 years old will experience unwanted pregnancy (NCPTU, 2017). Additionally, young adults (15-24) account for half of the new STI's (CDC, 2017). Previous research has found that gender norms can have detrimental impacts on factors related to safe sex practices (e.g., condom use) such as perceptions of responsibility, self-efficacy and partner communication (Bertens et al., 2008; Fantasia et al., 2014; French & Holland, 2013; Huber & Eresek, 2011; Impett et al., 2006; Noar et al., 2002). Conversely, findings have shown that communal (other-oriented) motivations is a predictor of condom use intentions; however, it has not been examined as how it relates and/or interacts with gender norms, perceptions of responsibility, self-efficacy and partner communication. We hypothesized that communal motivation and gender norms would interact to predict perceptions of responsibility and self-efficacy, which in turn would predict partner communication, and ultimately condom use intentions. We also expected the interactions to differ based on participant gender. We surveyed over 600 college-aged participants across two studies. Across the studies, we found the predicted negative relationships between gender norms and safe sex practices, in addition, we also found anticipated positive relationships between communal motivations and safe sex practices. Likewise, gender differences in results also emerged. These findings will help illuminate critical factors associated with safe sex practices and will also supplement future sexual health education approaches. Implications and variances across the studies are discussed.

## **Introduction**

Unwanted pregnancies and STDs on college campuses are a public health concern that can impede young adults from attaining their career and education goals. For instance, one in four women under the age of 20 (especially among 18-19-year-olds) in the U.S. will experience an unwanted pregnancy (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2017). Further, 61% of women in college who experience an unwanted pregnancy do not complete their degree (The National

Campaign to Prevent Teen and Unplanned Pregnancy, 2017). According to the CDC (2017), of the 20-million new STDs in the U.S., 15-24-year-olds account for half of the occurrences, while they consist of only one-quarter of the sexually active population. Despite efforts to fill the gaps in current sexual health education, there are factors beyond knowledge gaps that play a significant role in condom use such as communal (other-oriented) motivations (Rooney et al., in press), self-efficacy, perceptions of responsibility that are related to gender norms, and partner communication related to self-efficacy (Bertens et al., 2008; Fantasia et al., 2014; French & Holland, 2013; Huber & Ersek, 2011; Impett et al., 2006; Noar et al., 2002). The current research examines how communal motivations and gender norms contribute to self-efficacy, perceptions of responsibility, and partner communication. Further, the current research examines how self-efficacy, perceptions of responsibility, and partner communication contribute to condom use intentions.

Greater reliance on societal expectations affiliated with traditional gender roles, known as gender norms, are associated with less sexual self-efficacy among young women. For instance, women more reliant on conventional femininity are more likely to report diminished self-efficacy and risky sex practices (Impett et al., 2006). Similarly, women consistently report lower self-efficacy in terms of condom negotiation and consent due to gender-related expectations (Fantasia et al., 2014). Thus, gender norms may have a detrimental impact on women's self-efficacy, which is particularly problematic because low levels of self-efficacy are widely found to be negatively related to partner communication and safe sex practices. For instance, while negotiating safe sex is a critical component of consistent condom use, women who negotiate safe sex practices are more likely to report high levels of self-efficacy (Bertens et al., 2008). Further, women who are most likely to engage in condom negotiation are also more likely to report high levels of self-efficacy (French & Holland, 2013). Lastly, condom negotiation is strongly predicted by condom use self-efficacy and, in turn, strongly predicts condom use and condom use intentions (Noar et al., 2002). Therefore, there is clear evidence that self-efficacy plays a major role in factors that predict safe sex practices including condom negotiation, and, in turn, intentions to use a condom and condom use.

Accordingly, although gender norms seemingly diminish self-efficacy particularly among women and diminished self-efficacy is associated with diminished partner communication and safe sex practices, women also commonly feel that avoiding

pregnancy and STIs are primarily their responsibility as compared to men. For instance, although 89% of women reported that responsibility for birth control should be shared with their sexual partner, only 51% of women reported that responsibility is actually shared with their sexual partner (Huber & Ersek, 2011). Similar findings have emerged highlighting that women feel burdened by the expectation of sole responsibility for birth control (Fantasia et al., 2014). Therefore, there is a gendered aspect to perceptions of responsibility for birth control. These findings suggest that due to gender norms, despite that responsibility for birth control is placed on women, women may not implement birth control due to diminished self-efficacy.

Conversely, thinking about one's partner, known as sexual communal motivations, is linked to overall relationship well-being and satisfaction (Muisse & Impett, 2016). Communal motivation is in contrast to an exchange relationship, which is based on reciprocity. Recent work has consistently found a positive relationship between communal motivations and safe sex practices (Rooney et al., in press). These findings suggest that communally motivated individuals consider their sexual partner when making decisions about sex by taking into account their partner's sexual health and how an unwanted pregnancy or STI may impede their career or educational goals. Nonetheless, communal motivation has not previously been examined in how it interacts and/or relates to the factors that have been found to predict or impede condom use intentions such as gender norms, perceptions of responsibility, and self-efficacy.

In summary, evidence strongly suggests that gender norms diminish self-efficacy and influence gendered discrepancies in perceptions of responsibility. Further, that diminished self-efficacy decreases the likeliness of individuals to engage in partner communication, while high levels of self-efficacy promote partner communication, which is related to safe sex practices. Likewise, communal motivation predicts safe sex practices, such as condom use, and condom use intentions. Although relationships have been established for sexual health practices and these variables independently, this research will explore how these variables interact and/or relate to predict safe sex practices among college-aged individuals. We hypothesized that communal motivation and gender norms would interact to predict perceptions of responsibility and self-efficacy, which in turn would predict partner communication, and ultimately condom use intentions. We expected that communal motivation would positively

predict factors related to safe sex practices, while gender norms would negatively predict factors related to safe sex practices. We expected these relationships to differ based on participant gender.

## Study 1

### Method

#### *Participants*

We recruited 353 participants (age range = 18-32, median age = 24, 65.3% women, 34.7% men; 67.9% White, 9.6% Black, 8.7% Latinx, 6.7% Asian, 3.5% Multiracial, 2.9% Other; 75.3% heterosexual, 14.4% bisexual, 4.2% homosexual, 2.9% asexual, 2.2% pansexual; 73.4% were enrolled in college, 26.6% were not enrolled in college; 34.6% of those enrolled in college were seniors, 10.6% sophomores, 10.3% juniors, 8% post-graduates, 5.1% other) were recruited from Amazon's Mechanical Turk (MTurk) in exchange for \$1.

Four attention checks were randomly embedded within measures to ensure the online participants were paying attention to each item on the survey. Participants were excluded from the data if they failed at least one of the four attention checks (some failed multiple attention checks): 1) If you are paying attention to this survey indicate so, by choosing 3- Yes (20 participants failed this attention check), 2) If you are paying attention to this survey, indicate so by answering "Strongly agree" (28 participants failed this attention check), 3) If you are being attentive to this survey, indicate so by choosing "Extremely" (30 participants failed this attention check), 4) If you are paying attention to this survey, answer 7- Very much so (53 participants failed this attention check). Thus, a total of 56 participants were excluded from the data.

#### *Measures*

Participants rated their reliance on gender norms, communal motivation, perceived responsibility for birth control, self-efficacy, partner communication, and condom use intentions. These measures and the subsequent analyses were preregistered at <https://aspredicted.org/blind.php?x=qt98ww>. As part of a larger survey, participants also indicated their communal orientation, communal strengths, and communal and exchange relationship tendencies; given these measures are not relevant to our hypotheses, they will not be discussed. Individual questions within each measure were randomly ordered.

**Gender norms.** Participants rated twenty items on their reliance on gender norms on 7-point scales (1- strongly disagree to 7- strongly agree; Seabrook et al., 2016). For instance, “Men should be the ones to ask women and initiate physical contact”. These items were averaged such that higher ratings indicate more reliance on gender norms ( $\alpha = .922$ ).

**Sexual communal motivation.** Participants rated five items related to their communal motivation toward their sexual partner(s) on 7-point scales (1- strongly disagree to 7- strongly agree; Rooney et al., in press). For instance, “How far are you willing to go to prevent your partner from becoming pregnant or getting you pregnant”. These items were averaged such that higher ratings were indicative that the participants were more communally motivated ( $\alpha = .880$ ).

**Perceived responsibility for birth control.** Participants rated two items: 1) In your opinion, who should be responsible for “taking care” of birth control, and 2) In your experience, who ends up being responsible for “taking care” of birth control, to determine who they perceive is responsible to use birth-control (Huber & Ersek, 2011). Items are single item measures and answer options included: 1= the man, 2= both the man and woman, or 3= the woman.

**Condom use self-efficacy.** Participants rated 10 items related to their perceptions of condom use self-efficacy on 7-point scales (1- strongly disagree to 7- strongly agree; Barkley et al., 2000). Items were categorized into three factors which were averaged together to create a composite measure (See Table 3): 4 items related to appropriation (e.g., I feel confident in my ability to put a condom on myself or my partner;  $\alpha = .744$ ); 3 items related to STDs (e.g., I would not feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I’ve had a past homosexual experience;  $\alpha = .909$ ); and 3 items related to partner’s reaction (e.g., If I were to suggest a condom to a partner, I would feel afraid he or she would reject me;  $\alpha = .724$ ). Items for each scale were averaged such that higher scores were indicative of low condom use self-efficacy.

**Partner communication.** To determine how likely or frequently participants were to communicate with their sexual partner(s) about practicing safe sex practices, they were asked during the past 6 months, how many times have you and your sex partner discussed: how to prevent pregnancy, how to use condoms, how to prevent the AIDS virus, how to prevent STDs, and their partner’s sexual history (Milhausen et al., 2008). Items were averaged such that higher numerical values

indicate that participants were more likely to communicate safe sex practices with their partner(s) ( $\alpha = .676$ ).

**Condom influence strategies (CIS).** Participants rated twenty-eight items on how likely they were to communicate condom use with their partner(s) on 7-point scales (1-strongly disagree to 7-strongly agree; Noar et al., 2002). Items were categorized into 7 factors and were averaged to form a composite measure: 4 items related to withholding intercourse (e.g., Tell my partner that I will not have sex with him/her if we do not use a condom;  $\alpha = .978$ ), 4 items related to direct request (e.g., Ask that we use condoms during sex;  $\alpha = .953$ ), 4 items related to seduction (e.g., Start “fooling around” and then pull out a condom when it was time;  $\alpha = .911$ ), 4 items related to relationship conceptualization (e.g., Tell my partner that since we love and trust one another, that we should use a condom;  $\alpha = .935$ ), 4 items related to STD risk (e.g., Tell my partner that if we don’t use a condom, then one of us could end up with a sexually transmitted disease [STD];  $\alpha = .944$ ), 4 items related to deception (e.g., Make up a reason why I want him/her to use a condom, even though my real reason is to protect myself against disease;  $\alpha = .899$ ), and 4 items related to pregnancy risk (e.g., Tell my partner that in order to avoid pregnancy that they should use a condom;  $\alpha = .901$ ). Items were averaged such that higher scores indicate a higher likelihood that participants are to engage in condom influence strategies.

**Action planning.** Participants answered three items related to their plans to use condoms on 7-point scales (1- strongly disagree to 7- strongly agree; Carvalho et al., 2015). For instance, I have made concrete plans on when to always use a condom (when I have sex, vaginal and/or anal intercourse). Items were averaged such that higher scores indicated that participants made concrete plans on using condoms ( $\alpha = .906$ ).

## Results

**Overview of analysis.** In Studies 1 and 2, we examined how communal motivation, and gender norms, and their interaction influence sexual health practices (see Figure 1 for the model tested with statistics). Although we preserved our original hypothesized model and included the intended variables, we eliminated some factors from the measures we used for our main analysis as we did not have the power necessary to include all of the measures in the model. Thus, we selected subscales to include in the model which were the most relevant to our hypotheses, using the

correlations between the subscales as a guide (Study 1: see Table 1; Study 2: see Table 2). Our analyses accounted for correlations between perceptions of responsibility items, the self-efficacy variables and partner communication variables.

**Full model.** The first prediction tested whether there would be an interaction between communal motivation and gender norms, and whether it would predict perceptions of responsibility (who should be responsible and who is responsible) and self-efficacy (STD fear and rejection fear). Consistent with our hypothesis, an interaction between gender norms and communal motivations emerged and negatively predicted the self-efficacy variable STD fear. However, no interaction emerged that predicted perceptions of responsibility. Nonetheless, communal motivation and gender norms independently predicted both perceptions of responsibility and self-efficacy. Specifically, gender norms positively predicted responses that women should be responsible for birth control and positively predicted diminished self-efficacy. Further, communal motivations negatively predicted responses that women should be responsible for birth control. Likewise, communal motivation negatively predicted diminished self-efficacy.

The next prediction tested whether perceptions of responsibility and/or self-efficacy variables would predict partner communication (discussing STD risk, deceiving a partner to use a condom, discussing pregnancy risk). Perceptions of responsibility did not predict partner communication as anticipated. As anticipated, however, the self-efficacy variable STD fear positively predicted the partner communication variable discussing STD risk. Conversely, STD fear negatively predicted the partner communication variable discussing pregnancy risk. Further, rejection fear positively predicted the partner communication variable deceiving partner to use a condom. Lastly, partner communication variables discussing STD risk and discussing pregnancy risk, positively predicted condom use intentions.

We also examined indirect effects. An indirect effect emerged between communal motivation and condom use intentions through STD fear and discussing pregnancy risk. Specifically, communal motivation negatively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately, discussing pregnancy risk negatively predicted condom use intentions (95% CI 0.003 to 0.087). Further, an indirect effect emerged between gender norms and condom used intentions through STD fear and discussing STD risk. Specifically, gender norms positively predicted STD fear, STD fear negatively predicted discussing STD

risk with their partner, and ultimately discussing STD risk positively predicted condom use intentions (95% CI 0.011 to 0.104). Lastly, an additional indirect effect emerged between gender norms and condom use intentions through STD fear and discussing pregnancy risk. Specifically, gender norms positively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately, discussing pregnancy risk negatively predicted condom use intentions (95% CI -0.119 to -0.008).

**The models by gender.** Additionally, we examined how this model differed by participant gender (see Figures 2 and 3 for the model tested with statistics). The first prediction tested whether there would be an interaction between communal motivation and gender norms, and whether it would predict perceptions of responsibility items who should be responsible and who is responsible, and self-efficacy (STD fear and rejection fear). Instead, among men, we found that communal motivation and gender norms independently predicted self-efficacy variables. However, neither variable predicted perceptions of responsibility. Specifically, we found that gender norms positively predicted diminished self-efficacy, while communal motivations negatively predicted diminished self-efficacy variable STD fear. Further, self-efficacy variable STD fear negatively predicted partner communication variable discussing pregnancy risk. Although, among men, partner communication variable discussing pregnancy risk positively predicted condom use intentions. For men, we also examined indirect effects. An indirect effect emerged between communal motivation and condom use intentions through STD fear and discussing pregnancy risk. Specifically, communal motivation negatively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately discussing pregnancy risk positively predicted condom use intentions (95% CI 0.020 to 0.239).

Among women, an interaction between gender norms and communal motivations emerged and negatively predicted responses that women should be responsible for birth control. However, no interaction emerged that predicted self-efficacy. Nonetheless, communal motivation and gender norms independently predicted both perceptions of responsibility and self-efficacy. Specifically, among women, gender norms positively predicted responses that women should be responsible for birth control and positively predicted diminished self-efficacy. Communal motivation, however, negatively predicted responses that women should

be responsible for birth control and negatively predicted diminished self-efficacy. Further, among women, STD fear positively predicted partner communication variable discussing STD risk. Lastly, partner communication variables discussing STD risk and discussing pregnancy risk, positively predicted condom use intentions. For women, we also examined indirect effects. An indirect effect emerged between communal motivation and condom use intentions through STD fear discussing STD risk. Specifically, communal motivations negatively predicted STD fear, STD fear positively predicted discussing STD risk with their partner, and ultimately discussing STD risk positively predicted condom use intentions (95% CI 0.006 to 0.148).

## **Discussion**

We hypothesized that communal motivations and gender norms would interact to predict perceptions of responsibility and self-efficacy, which would predict partner communication, and ultimately safe sex practices. Consistent with our hypothesis, an interaction between gender norms and communal motivations emerged to negatively predict diminished self-efficacy. Further, consistent with our hypothesis and previous findings, gender norms predicted perceptions that women should be responsible for birth control (Huber & Ersek, 2011; Fantasia et al., 2014), while communal motivation negatively predicted perceptions that women should be responsible for birth control. Further, we found that consistent with our hypotheses and previous literature (Impett et al., 2006), gender norms diminished self-efficacy, while more communally motivated participants reported higher self-efficacy. Interestingly, but inconsistent with our hypotheses, we found that diminished self-efficacy related to STD fear positively predicted partner communication variable discussing STD risk. Likewise, rejection fear predicted partner communication variable deceiving partner to use a condom. Moreover, consistent with our hypotheses, partner communication predicted condom use intentions. Lastly, consistent our hypothesis, an indirect effect revealed a positive relationship between communal motivation and condom use intentions. Further, inconsistent with our hypotheses, an indirect effect emerged that suggested a positive relationship between gender norms and condom use intentions. Although in this instance, gender norms positively predicted diminished self-efficacy related to STD fear, and in turn, positively predicted discussing STD risk and ultimately condom use intentions.

As anticipated, there were discrepancies in the findings based on participant gender. For instance, among men, we did not find the anticipated interaction between communal motivation and gender norms, as we found for women. Likewise, among men, we did not find that gender norms nor communal motivations predicted perceptions of responsibility, as we did for women. For both men and women, reliance on gender norms predicted diminished self-efficacy. However, communal motivations negatively predicted diminished self-efficacy variable STD fear for men, while communal motivations negatively predicted diminished self-efficacy variables STD fear and rejection fear for women. Likewise, there were discrepancies in partner communication among men and women as well. For instance, men that experienced diminished self-efficacy related to STD fear, were less likely to engage in partner communication related to discussing pregnancy risk. Conversely, women that experienced diminished self-efficacy related to STD fear were more likely to engage in partner communication related to discussing STD risk. Lastly, although partner communication related to discussing STD and pregnancy risk predicted condom use intentions among women, only discussing pregnancy risk was related to condom use intentions among men. Further discrepancies appeared within indirect effects as well. For instance, among both men and women, a positive relationship between communal motivation and condom use intentions emerged. For men, however, while STD fear negatively predicted discussing pregnancy risk, for women STD fear positively predicted discussing STD risk. In both instances, partner communication variables positively predicted condom use intentions.

This online sample was limited to predominantly white women and the age range slightly varied from our age of interests (18-24), although the median age for the sample was 24 years old. For instance, unsafe safe sex practices are specifically a concern among college aged individuals (ages 18-24), as they report the highest rate of unwanted pregnancies and STIs compared to any other age group (CDC, 2017; NCPTUP, 2017). To clarify the relationships, we found in the initial sample, we recruited a college sample for our next study to gain a better understanding of sexual health practices, particularly among college-aged individuals.

## Study 2

### Method

We recruited 265 undergraduate students (age range = 18-42, median age = 20, 86.3% women, 13.7% men; 57.4% White, 14.3% Black, 12.5% Latinx, 5.7% Asian, 5.3% Multiracial, 2.6% Other; 77.4% heterosexual, 13.2% bisexual, 5.7% homosexual, 1.1% asexual, 1.1% pansexual; 38.5% juniors, 21.9% sophomores, 18.9% freshman, 18.9% seniors, 1.5% post-graduates) from the University of North Florida (UNF) in exchange for partial course credit.

Two attention checks were randomly embedded within measures to ensure the participants were paying attention to each item on the survey. Participants were excluded from the data if they failed at least one of the two attention checks (some failed multiple attention checks): 1) If you are paying attention to this survey, answer strongly agree (12 failed this attention check), 2) If you are paying attention to this survey, answer 7-Very much so (5 failed this attention check). Thus, a total of 13 participants were excluded from the data.

Participants rated their reliance on gender norms ( $\alpha = .865$ ), communal motivation ( $\alpha = .879$ ), perceived responsibility for birth control, self-efficacy (appropriation:  $\alpha = .723$ , STD fear:  $\alpha = .849$ , rejection fear:  $\alpha = .618$ ), partner communication ( $\alpha = .571$ ) (CIS= withhold intercourse:  $\alpha = .987$ , direct request:  $\alpha = .973$ , seduction:  $\alpha = .893$ , relationship conceptualization:  $\alpha = .946$ , STD risk:  $\alpha = .959$ , deception:  $\alpha = .909$ , pregnancy risk:  $\alpha = .866$ ), and condom use intentions ( $\alpha = .921$ ) using the same scales and procedures as Study 1. Further, as part of a larger survey, participants also indicated their communal orientation, communal strengths, and communal and exchange relationship tendencies.

### Results

**Full model.** We examined how communal motivation, and gender norms, and their interaction influence sexual health practices (see Figure 4 for the model tested with statistics). Our analyses accounted for correlations between perceptions of responsibility items, the self-efficacy variables, and partner communication variables.

The first prediction tested whether there would be an interaction between communal motivation and gender norms that would predict perceptions of responsibility (who should be responsible and who is responsible) and self-efficacy (appropriation, fear of a partner presuming an STD, and fear of rejection). Instead

we found that only gender norms predicted perceptions of responsibility and that communal motivation and gender norms independently predicted self-efficacy. Specifically, gender norms positively predicted responses that women should be responsible for birth control. Further, gender norms positively predicted decreased self-efficacy variables STD fear and rejection fear. Conversely, communal motivation negatively predicted self-efficacy variable, STD fear.

The next prediction tested was whether perceptions of responsibility and/or self-efficacy variables would predict partner communication variables (discussing STD risk, deceiving a partner to use a condom, discussing pregnancy risk). Perceptions that women should be responsible for birth control negatively predicted partner communication variable discussing pregnancy risk, while self-efficacy variable STD fear negatively predicted partner communication variable discussing pregnancy risk. Lastly, partner communication variables discussing STD and pregnancy risks positively predicted safe sex practices.

We also examined indirect effects. An indirect effect emerged between communal motivation and condom use intentions through STD fear and discussing pregnancy risk. Specifically, communal motivation negatively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately discussing pregnancy risk positively predicted condom use intentions (95% CI 0.004 to 0.139). Further, an indirect effect emerged between gender and condom use intentions through STD fear and discussing pregnancy risk. Specifically, gender norms positively predicted STD fear, STD fear negatively predicted discussing pregnancy risk, and ultimately, discussing pregnancy risk negatively predicted condom use intention (95% CI  $-0.093$  to  $-0.008$ ).

**The models by gender.** Additionally, we examined how this model differed by participant gender (see Figures 5 and 6 for the model tested with statistics). Among men, we found that gender norms positively predicted decreased self-efficacy variable, rejection fear. In turn, rejection fear negatively predicted partner communication variable, deceiving their partner to use a condom. In contrast, self-efficacy variable STD fear positively predicted partner communication variable deceiving their partner to use a condom. Lastly partner communication variable discussing pregnancy risk positively predicted safe sex practices. No indirect effects emerged among men.

Among women, gender norms positively predicted responses that women should be responsible for birth control. Likewise, gender norms positively predicted

decreased self-efficacy variables STD fear and partner rejection. Conversely, communal motivation negatively predicted STD fear. Further among women, responses that women end up being responsible for birth control positively predicted partner communication variable deceiving their partner to use a condom, while responses that women should be responsible for birth control negatively predicted partner communications variable discussing pregnancy risk. Partner communication variables discussing STD and pregnancy risk positively predicted safe sex practices. For women, we also examined indirect effects. An indirect effect emerged between communal motivation and condom use intentions through STD fear and discussing pregnancy risk. Specifically, communal motivation negatively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately, discussing pregnancy risk positively predicted condom use intentions (95% CI 0.004 to 0.168). Further, an indirect effect emerged between gender norms and condom use intentions through STD fear and discussing pregnancy risk. Specifically, gender norms positively predicted STD fear, STD fear negatively predicted discussing pregnancy risk with their partner, and ultimately, discussing pregnancy risk with their partner negatively predicted condom use intentions (95% CI -0.070 to -0.002).

## **Discussion**

We hypothesized that communal motivation and gender norms would interact to predict perceptions of responsibility and self-efficacy, which would predict partner communication, and ultimately safe sex practices. Inconsistent with Study 1, we did not find the anticipated interaction, however, again found that gender norms predicted perceptions that women should be responsible for birth control. Although, we did not find a negative relationship between communal motivations and perceptions that women should be responsible for birth control, as we did in Study 1. Consistent with Study 1's findings, however, gender norms diminished self-efficacy. Likewise, more communally motivated participants reported higher self-efficacy, but only for the STD fear. In contrast, in Study 1 we saw higher self-efficacy for variables STD fear and rejection fear. Unique to Study 2 findings, we found that perceptions that women should be responsible for birth control was negatively related to discussing pregnancy risk. Nevertheless, consistent with Study 1's findings, STD fear was negatively related to discussing pregnancy risk. Likewise, partner

communication predicted condom use intentions. Similar to Study 1, an indirect effect emerged to reveal a positive relationship between communal motivations and condom use intentions. Likewise, across the studies an indirect effect emerged to reveal a negative relationship between gender norms and condom use intentions.

Like Study 1's findings, there were discrepancies in the results based on participant gender as anticipated, with slight variations across the studies. For instance, across both studies, we did not find an anticipated interaction between communal motivations and gender norms among men specifically. We did not, however, find the anticipated interaction among women as we found in Study 1. Like Study 1, we found that gender norms nor communal motivations predicted perceptions of responsibility for men. Among women however, across both studies we found that gender norms predict perceptions that women should be responsible for birth control. Although, we did not find that communal motivations negatively predicted perceptions that women should be responsible for birth control for women, as we did in study 1. Congruent with Study 1 findings, we saw that among men and women independently, reliance on gender norms was related to diminished self-efficacy. Yet, we did not find that communal motivations negatively predicted diminished self-efficacy for men, as we found in Study 1. Like Study 1's findings, we also found that women more communally motivated were less likely to report diminished self-efficacy related to STD fear, however in Study 1, women more communally motivated were less likely to report diminished self-efficacy related to STD fear and rejection fear.

While we found a negative relationship between diminished self-efficacy and partner communication among men across the studies, these relationships differed. For instance, we found that men who reported diminished self-efficacy related to rejection fear were less likely to engage in partner communication related to deceiving partner to use a condom. Further, that men who reported diminished self-efficacy related to STD fear were more likely to engage in partner communication related to deceiving partner to use a condom. In contrast, in Study 1 we found that men who reported diminished self-efficacy related to STD fear, were less likely to engage in partner communication related to discussing pregnancy risk. Unique to Study 2, we found that among women, perceptions that women should be responsible for birth control was negatively related to discussing pregnancy risk. Additionally, among women perceptions that women end up being responsible was positively associated

with deception. These findings are in contrast to Study 1's findings that suggest women who report diminished self-efficacy are more likely to engage in partner communication related to STD risk. Similar to Study 1, among women, partner communication related to discussing STD risk and pregnancy risk was related to condom use intentions. Further, only discussing pregnancy risk was related to condom use intentions for men across both studies. Indirect effects, such as in Study 1, differed by participant gender, however, there were no indirect effects found for men in Study 2. Nonetheless, just as in Study 1, an indirect effect emerged among women, revealing a positive relationship between communal motivation and condom use intentions. Unique to Study 2, however, an indirect effect emerged among women, that revealed a negative relationship among gender norms and condom use intentions.

### **General Discussion**

Across Studies 1 and 2 some notable similarities emerged. Most prevalent was the negative relationship between gender norms and self-efficacy in both men and women that was consistent with our hypothesis. Likewise, gender norms predicted responses that women should be responsible for birth control. Also consistent with our hypothesis, communally motivated participants in both samples were more likely to report high self-efficacy. Further, partner communication predicted condom use intentions. Correspondingly, diminished self-efficacy related to STD fear had a negative relationship with partner communication related to discussing pregnancy risk. Lastly, across the two samples, a positive indirect effect emerged between communal motivations and condom use intentions. Likewise, across the samples, a negative indirect effect emerged between gender norms and condom use intentions.

As anticipated, gender differences in results emerged similarly across both samples, suggesting that there are gender differences in sexual health practices. For example, across the studies, gender norms predicted responses that women should be responsible for birth control among women specifically, but not among men specifically. Further, discussing STD risk was not related to condom use intentions for men as it was for women across the studies. Likewise, our findings suggest that gender norms diminish self-efficacy in both men and women, although less research has been focused on how gender norms affect men's self-efficacy. The lack of equal focus on men and women in sexual health research and education might also help explain the discrepancies in perceptions of responsibility for birth control among men and women.

Although significant similarities across the samples were detected, we also detected significant dissimilarities. For example, the anticipated interaction between communal motivation and gender norms was only present in Study 1. Likewise, exclusively in Study 1, a negative relationship between communal motivations and perceptions that women should be responsible for birth control emerged. Exclusively in Study 2, we found that perceptions that women should be responsible for birth control had a negative relationship with discussing pregnancy risk, and yet, perceptions that women end up being responsible, was positively related to deceiving partner to use a condom. This may be explained by the fact that if women are deemed responsible for birth control then there is no motive for genuine discussion for birth control (e.g., deceiving partner to use a condom).

Finally, indirect effects emerged with slight differences by gender. For instance, no indirect effects emerged specifically for men in Study 2. While across the studies, a similar positive indirect effect emerged for women specifically between communal motivation and condom use intentions. However, while self-efficacy related to STD fear positively predicted discussing STD risk in Study 1, in Study 2 diminished self-efficacy negatively predicted discussing pregnancy risk. Partner communication in both instances, nonetheless, positively predicted condom use intentions.

In summary, previous research has distinguished a clear negative relationship between women's reliance on gender norms and self-efficacy, although, there is less clarity on how reliance on gender norms influence men's self-efficacy (Fantasia et al., 2014; Impett et al., 2006). Nonetheless, in this research, we saw a negative relationship between gender-norms and self-efficacy emerge for both men and women. Consistent with previous literature, however, we saw discrepancies in perceptions of responsibility among men and women (Fantasia et al., 2014; Huber & Ersek, 2011) as well as gender differences in sexual health approaches and behaviors. Likewise, although we saw that gender norms diminish self-efficacy for both men and women, we found that diminished self-efficacy influenced partner communication strategies differently for men and women. This supports previous research that highlights how sexual health approaches are disproportionately targeted toward women (Lohan, 2015). Further, a finding that is notable although inconsistent with our hypothesis, is that across both studies diminished self-efficacy actually predicted partner communication variables in some instances. For example, among women in Study 1, STD fear predicted discussing STD risks with their partner(s). Likewise, in Study 2,

among men, STD fear predicted deceiving their partner to use a condom. Therefore, these findings suggest there may be an element of fear associated with self-efficacy that may influence the likeliness to engage in partner communication, which as we have found, is related to condom use and condom use intentions (Noar et al., 2002).

### **Limitations and Future Directions.**

Across both studies, the samples were predominantly white women. In future studies, we would need to include more men in our sample to make generalized associations or claims for gender differences in sexual health practices and approaches. Likewise, we would also include a more racially and ethnically diverse sample. For instance, women who are racial and ethnic minorities are at a higher risk of unwanted pregnancy than white women (CDC, 2018). Therefore, with a more diverse sample, there may be more disparities in condom use intentions or other factors related to condom use intentions that would be illuminated.

Future studies would also shift its focus to STI prevention, and therefore we would want to include sexual minorities in the sample to gain a better understanding of their sexual health practices as well. For instance, men that identify as gay or bisexual are a disproportionately high-risk population for STIs (CDC, 2019). Also, we would want to factor in socioeconomic status (SES) of participants as low SES individuals are also a high-risk population for unwanted pregnancies and STI due to limited resources, access to healthcare, and education (CDC, 2018). We anticipate that by including sexual minorities and accounting for SES, that we would see disparities in the results compared to the current Study that would be indicative of more generalized sexual health approaches.

Future research would examine condom use along with condom use intentions to make a stronger case for the relationship with safe sex practices. For instance, this research exclusively measured condom use intentions, but not literal condom use. We anticipate that although condom use intentions would be related to condom use, we would have a more direct understanding of safe sex practices among the participants. Due to the findings that suggested that fear may play a role in partner communication. Future research should look more in depth at fear in the context of self-efficacy and sexual health practices. For example, scare tactics or fear appeals have been unsuccessfully implemented in some sexual health education approaches. However, fear has not been examined with how it relates to self-efficacy (Wilson et

al., 2012). Lastly, although we would argue that it's important to gain a generalized understanding of college-aged individuals sexual health perceptions and behaviors, future research would exclude participants that indicate they are not sexually active. By including exclusively sexually active participants, we would gain a more accurate understanding of the real-life implications of sexual health perceptions and behaviors.

## **Conclusion**

The purpose of this research was to expand the literature and understanding of what factors influence sexual health practices and how to improve current approaches to sexual health education. Despite efforts to improve sexual health education, unwanted pregnancy among college-aged individuals and continuous increase in contraction of STIs remain to be a public health concern, so better understanding factors may impede or predict sexual health practices is a first step to improving current approaches to sexual health education. Overall, our findings supported previous research related to gender norms, perceptions of responsibility, self-efficacy, and partner communication (Bertens et al., 2008; Fantasia et al., 2013 Huber & Ersek, 2011; Impett et al., 2006; Noar et al., 2002). We also examined how communal motivation and how these variables interacted with and influenced these relationships. These current findings, along with previous literature support that communal motivation and the inclination to think of one's sexual partner when making sexual health decisions improve condom use intentions (Rooney et al., 2019). Therefore, future interventions might be more successful by finding ways to implement communal motivation in sexual health education and using it as a tool to facilitate factors like partner communication, that involve engaging in other-oriented actions and behaviors.

## References

- Adolescents and Young Adults | Prevention | STDs | CDC. (n.d.). Retrieved from <https://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm>.
- Bertens, M. G., Wolfers, M. E., Borne, B. V. D., & Schaalma, H. P. (2008). Negotiating safe sex among women of Afro-Surinamese and Dutch Antillean descent in the Netherlands. *AIDS Care, 20*(10), 1211–1216. doi: 10.1080/09540120802009070.
- Carvalho, T., & Alvarez, M.J. (2015). Preparing for male condom use: The importance of volitional predictors. *International Journal of Sexual Health, 27*(3), 303–315. <https://doi-org.dax.lib.unf.edu/10.1080/19317611.2014.982264>.
- Clark, M. S., & Mills, J. R. (2012). A theory of communal (and exchange) relationships. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 232-250). Thousand Oaks, CA: Sage Publications Ltd.
- Fantasia, H.C., Sutherland, M.A., Fontenot, H., Ierardi, J.A. (2014). Knowledge, Attitudes and Beliefs about Contraceptive and Sexual Consent Negotiation among College Women. *Journal of Forensic Nursing, 10*(4), 199-207.
- French, S. E., & Holland, K. J. (2013). Condom Negotiation Strategies as a Mediator of the Relationship between Self-Efficacy and Condom Use. *Journal of Sex Research, 50*(1), 48-59. doi:10.1080/00224499.2011.626907.
- Gay, Bisexual and Other MSM. (2020, March 26). Retrieved from <https://www.cdc.gov/std/life-stages-populations/msm.htm>
- Huber, L. R., & Ersek, J. L. (2011). Perceptions of Contraceptive Responsibility Among Female College Students: An Exploratory Study. *Annals of Epidemiology, 21*(3), 197-203. doi:10.1016/j.annepidem.2010.11.006.
- Impett, E. A., Schooler, D., & Tolman, D. L. (2006). To Be Seen and Not Heard: Femininity Ideology and Adolescent Girls' Sexual Health. *Archives of Sexual Behavior, 35*(2), 129- 142. doi:10.1007/s10508-005-9016-0.
- Lohan, M. (2015). Advancing Research on Men and Reproduction. *International Journal of Men's Health, 14*(3). <https://doi.org/10.3149/jmh.1403.214>.

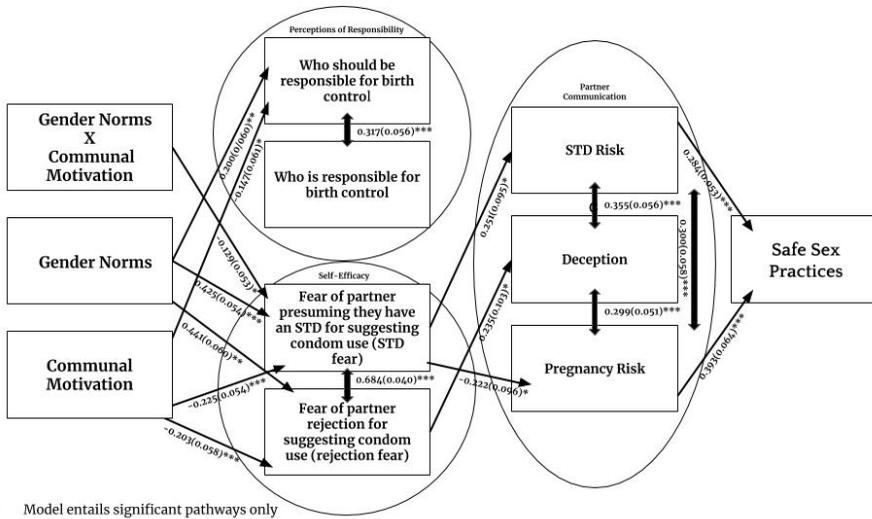
- Milhausen, R. R., McDermott Sales, J., Wingood, G. M., DiClemente, R. J., Salazar, L. F., & Crosby, R. A. (2007). Validation of a partner sexual communication scale for use in HIV/AIDS prevention interventions. *Journal of HIV/AIDS Prevention in Children and Youth*, 8(1), 11-33. [https://doi.org/10.1300/J499v08n01\\_02](https://doi.org/10.1300/J499v08n01_02).
- Noar, S. M., Morokoff, P. J., & Harlow, L. L. (2002). Condom negotiation in heterosexually active men and women: Development and validation of a condom influence strategy questionnaire. *Psychology and Health*, 17, 711-735. *Psychology and Health*, 17. 711-735. 10.1080/0887044021000030580.
- Rooney, M., Phillips, R., & Olds, C. (in press). Thinking About Your Sexual Partner: Examining Communal Motivations and Birth Control Use. *Health Education Monograph*.
- Prevent Unintended Pregnancy. (2018, October 4). Retrieved from <https://www.cdc.gov/sixteen/pregnancy/index.htm>.
- The National Campaign to Prevent Teen and Unplanned Pregnancy. (2015). Briefly: How is the 'Roughly 1 in 4' Statistic Calculated? Washington, DC: Author.
- The National Campaign to Prevent Teen and Unplanned Pregnancy. Preventing Unplanned Pregnancy and Completing College: Online Lessons-Faculty Page. Available at: <https://thenationalcampaign.org/resource/online-lessons-faculty-page>.
- Wilson, K. L., Wiley, D. C., & Rosen, B. (2012). Texas Sexuality Education Instruction: Shame and Fear-Based Methodology. *Journal of Health Education Teaching*, 3(1), 1-10.

**Table 1**  
**Study 1 Correlations**

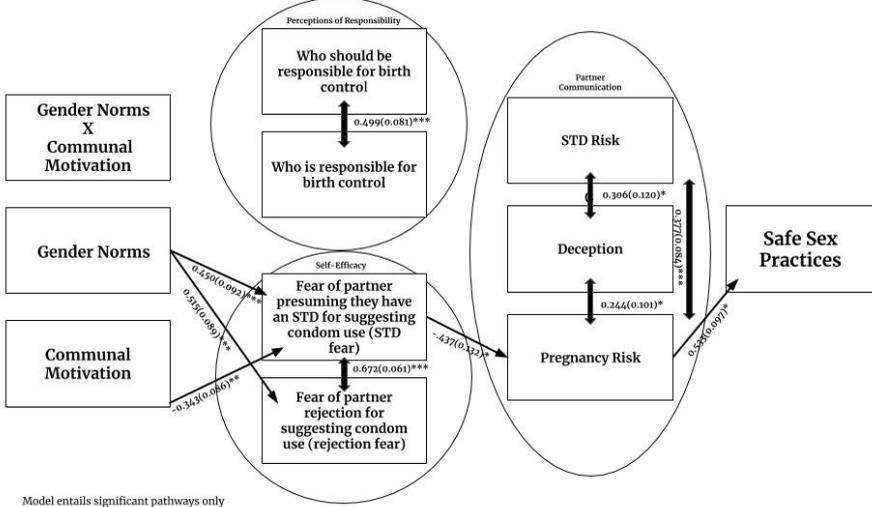
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender Norms	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2. Communal Motivations	-.215**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3. Who should be responsible for 'taking care' of birth control?	.220**	-.210**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4. Who ends up being responsible for 'taking care' of birth control?	-.089	.099	.267**	--	--	--	--	--	--	--	--	--	--	--	--	--
5. CUSE Factor 1: Appropriation	-.048	.312**	-.076	.067	--	--	--	--	--	--	--	--	--	--	--	--
6. CUSE Factor 2: STD Fear	.468**	-.343**	.129*	-.182**	-.272**	--	--	--	--	--	--	--	--	--	--	--
7. CUSE Factor 3: Rejection Fear	.473**	-.319**	.120*	-.111	-.386**	.773**	--	--	--	--	--	--	--	--	--	--
8. Partner Communication	.079	.117	-.035	-.068	.122	.113	.121*	--	--	--	--	--	--	--	--	--
9. CIS Factor 1: Withhold	-.200**	.282**	-.116*	.071	.189**	-.136*	-.183**	.110	--	--	--	--	--	--	--	--
10. CIS Factor 2: Direct Request	-.159**	.380**	-.160**	.019	.341**	-.221**	-.232**	.161**	.629**	--	--	--	--	--	--	--
11. CIS Factor 3: Seduction	.040	.183**	-.069	.000	.275**	-.087	-.112	.095	.397**	.443**	--	--	--	--	--	--
12. CIS Factor 4: Relationship Conceptualization	-.084	.257**	-.107	.039	.156**	-.018	-.038	.223**	.493**	.573**	.352**	--	--	--	--	--
13. CIS Factor 5: STD Risk	-.030	.067	-.028	.023	.081	.190**	.129*	.226**	.427**	.327**	.216**	.555**	--	--	--	--
14. CIS Factor 6: Deception	.247**	-.004	-.020	-.016	-.060	.267**	.301**	.125*	.180	.156	.233	.242	.382	--	--	--
15. CIS Factor 7: Pregnancy Risk	-.072	.322**	-.099	.012	.198**	-.201**	-.141*	.075	.402**	.586**	.419**	.516**	.251**	.234**	--	--
16. Action Planning	-.069	.198**	-.116*	-.109	.417**	-.153**	-.178**	.165**	.548	.599**	.427**	.427**	.357**	.135*	.450	--

**Table 2**  
**Study 2 Correlations**

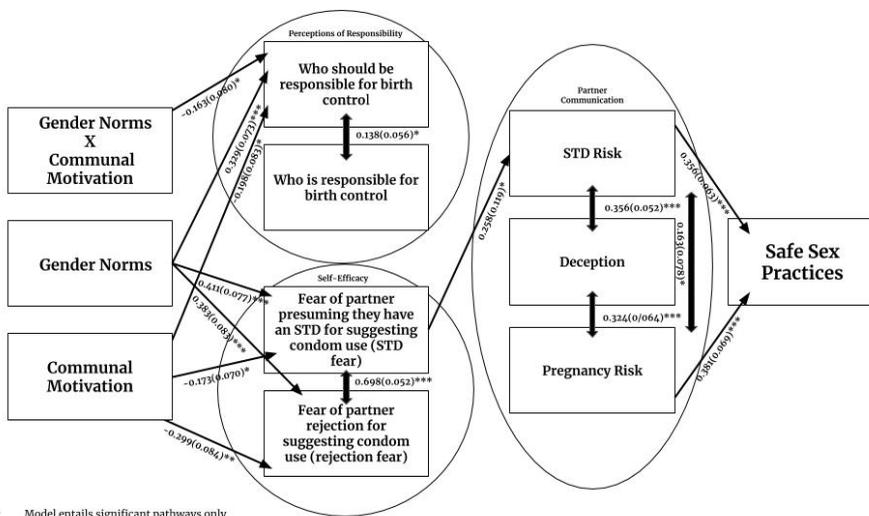
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender Norms	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2. Communal Motivations	-.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3. Who should be responsible for 'taking care' of birth control?	.131*	-.120	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4. Who ends up being responsible for 'taking care' of birth control?	-.028	.000	.138*	--	--	--	--	--	--	--	--	--	--	--	--	--
5. CUSE Factor 1: Appropriation	.005	.117	-.018	-.186**	--	--	--	--	--	--	--	--	--	--	--	--
6. CUSE Factor 2: STD Fear	.254**	-.237**	-.047	.001	-.247**	--	--	--	--	--	--	--	--	--	--	--
7. CUSE Factor 3: Rejection Fear	.340**	-.119	-.009	.123	-.308**	.639**	--	--	--	--	--	--	--	--	--	--
8. Partner Communication	-.070	.198**	-.035	-.030	.131*	-.093	-.183**	--	--	--	--	--	--	--	--	--
9. CIS Factor 1: Withhold	-.134*	.297**	-.054	.012	-.013	-.154*	-.173**	.038	--	--	--	--	--	--	--	--
10. CIS Factor 2: Direct Request	-.093	.347**	-.136**	.023	.127*	-.289**	-.239**	.097	.580**	--	--	--	--	--	--	--
11. CIS Factor 3: Seduction	.013	.233**	-.119	-.070	.254**	-.186**	-.159**	.059*	.369**	.524**	--	--	--	--	--	--
12. CIS Factor 4: Relationship Conceptualization	-.010	.334**	-.104	.039	-.003	-.023	.060	.071	.542**	.473**	.357**	--	--	--	--	--
13. CIS Factor 5: STD Risk	-.022	-.213**	-.104	.090	.054	-.003	-.033	.070	.465**	.473**	.291**	.563**	--	--	--	--
14. CIS Factor 6: Deception	.126**	.089	-.041	.134*	-.040	.080	.090	-.018	.145*	.195**	.237**	.163*	.212**	--	--	--
15. CIS Factor 7: Pregnancy Risk	.006	.468**	-.198**	-.024	.039	-.217**	-.147*	.064	.568**	.686**	.499**	.575**	.476**	.266**	--	--
16. Action Planning	.011	.378**	-.040	-.024	.351**	-.233**	-.198**	.210**	.451**	.484**	.398**	.423**	.322**	.060	.456**	--



**Figure 1:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices in study 1. Path coefficients represent statistically significant estimates. Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

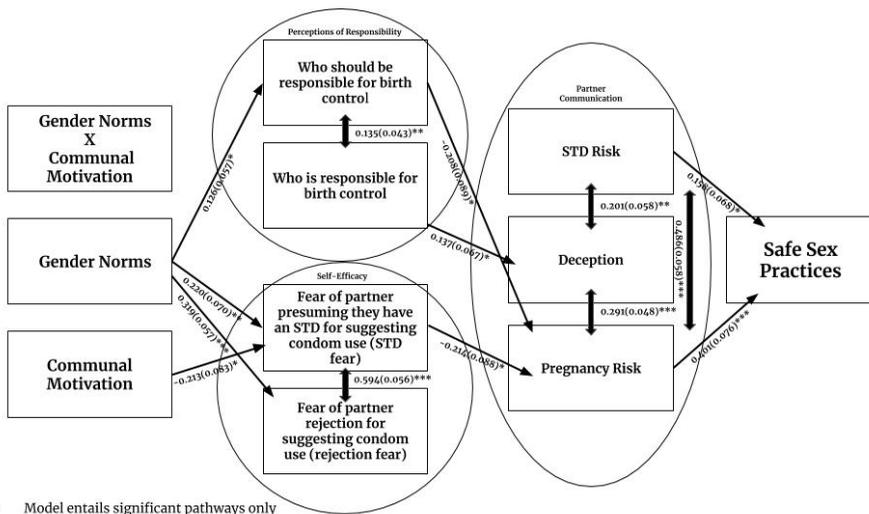


**Figure 2:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices for men to demonstrate gender differences in responses in study 1. Path coefficients represent statistically significant estimates. Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

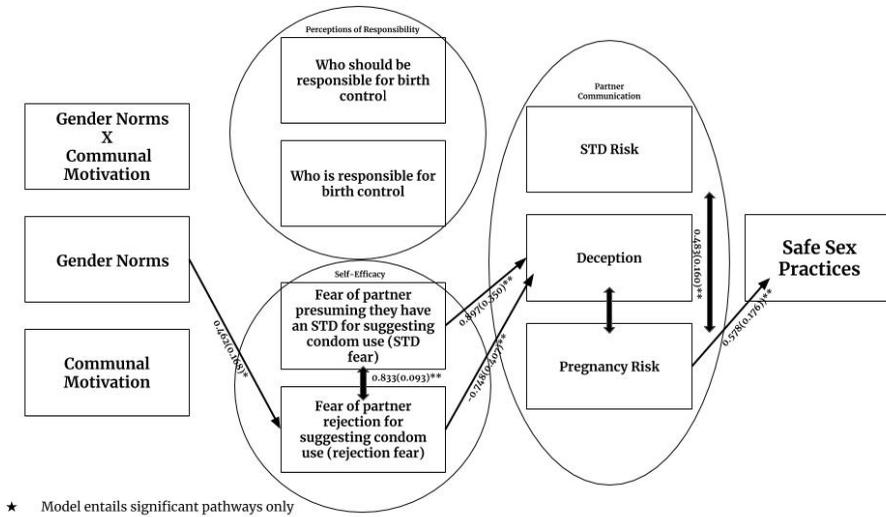


**Figure 3:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices for women to demonstrate gender differences in responses in study 1. Path coefficients represent statistically significant estimates.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

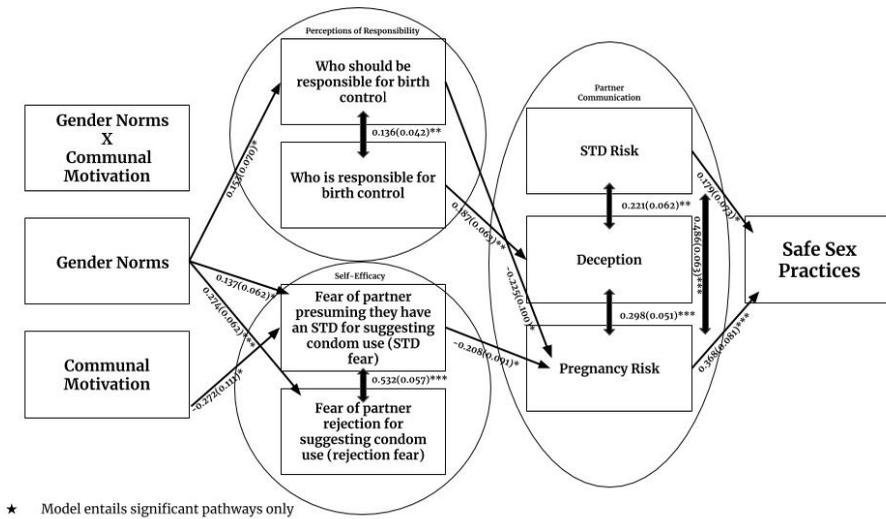


**Figure 4:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices in study 2. Path coefficients represent statistically significant estimates. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$



**Figure 5:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices for men to demonstrate gender differences in responses in study 2. Path coefficients represent statistically significant estimates.

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$



**Figure 6:** Testing how communal motivation and gender norms predict perceptions of responsibility and self- efficacy, and in turn partner communication, and ultimately safe sex practices for women to demonstrate gender differences in responses in study 2. Path coefficients represent statistically significant estimates.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$