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Regulatory Fit as a Predictor for Sexual Consent Attitude Change

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Regulatory Fit as a Predictor for Sexual Consent Attitude Change

by

Zuleyka Hernandez

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in partial fulfillment of the requirements for the degree of

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Abstract

Previous research indicates a gap in the knowledge regarding the situations in which regulatory fit or non-fit is most effective. Prior research has also demonstrated a gap in tools for encouraging the establishment of sexual consent and a generally negative attitude toward consent by college students regardless of its recognized importance in the college population. Regulatory non-fit (Messages that do not match the chronic regulatory focus of the audience) has also been shown to increase initially negative attitudes (Fridman et al., 2016; Avent et al., 2013). Our hypothesis was that a message of regulatory non-fit, designed to encourage direct, verbal sexual consent, would result in increased positive attitudes toward sexual consent, as moderated by regulatory focus. Study 1 consisted of 241 University of North Florida undergraduate students. Results for the primary analysis did not support the hypothesis. Study 2 consisted of 309 individuals recruited from Amazon's Mechanical Turk. Results for the primary analysis were all not statistically significant save one. Regulatory focus was shown to moderate the relation between regulatory fit and positive sexual consent attitude change, $p = 0.003$, $\Delta R^2 = 0.03$. This, however, was not in support of our hypothesis and demonstrated that a message of fit was more beneficial in increasing sexual consent attitudes. Exploratory analyses hinted at the possibility that the initial assumption that negative attitudes could be changed by messages of non-fit was misinformed and that the previous research actually pointed to messages of non-fit being more effective in changing strong, previously existing attitudes. Exploratory analyses also suggest that a message of fit may be more beneficial for those that have less pre-established attitudes. Future research should aim to explore this further and investigate the possibility of regulatory non-fit as a tool for persuading against powerful, previously existing attitudes.

Regulatory Fit as a Predictor for Sexual Consent Attitude Change

College students, especially women, are at high risk of sexual assault (Cranney, 2015). Women (28%) reportedly experience more than men (12%), but approximately 22% of students in general experience sexual assault during their college education (Mellins et al., 2017). Many students are living on their own and away from parents, experiencing a new sense of freedom. The ability to make their own decisions and new pressures and temptations make them especially vulnerable (Kuperberg & Padgett, 2015). Many are unfamiliar with their alcohol tolerance and unprepared to deal with the pressures to engage in alcohol and drug consumption. Ill-equipped, they can find themselves in dangerous situations where others can take advantage. This can apply to their ability to navigate sexual situations. They are unfamiliar with the new scenarios they may encounter with their new independence. Pressure, true or imagined, from peers to engage in sexual activity can also influence their decisions. The new social environment and perception of whether other students are engaging in sexual behaviors can influence students to act or feel obligated to participate (Chia & Lee, 2008).

Related to sexual assault is the issue of sexual consent. Whether a new scandal from a popular university is highlighted in the news or another, unrecognized individual falls victim to a consensually vague experience, the issue is prevalent, and efforts must be made to identify why this is occurring and how to prevent it. The aim of the present research is to develop a method of encouraging college students to use clear, verbal sexual consent practices. Although many of the issues pertaining to consent involve the use of drugs and alcohol, the matter is well researched, and many are working towards methods to reduce the occurrence of unclear or dangerous sexual consent scenarios. This project attempted to address a separate problematic area of consent: How to encourage college students to use more direct, verbal methods of establishing consent.

Sexual Consent

Even more experienced college students struggle to define consent and establish it clearly. In earlier research, participants were asked what the best ways to establish consent were, students rated verbal, direct consent highly, but when asked to rate which methods they used the most, verbal, direct consent was rated low (Hall, 1998). This method of consent is often deemed awkward and unnecessary. Students claim that it is often pointless as you can simply read other indirect signs of consent, for example, body language, eye contact, and other indirect verbal signals. Direct, verbal consent is perceived as rare among college students and most consent is established through more passive, indirect cues (Shumlich & Fisher, 2018).

In a study of long-term couples, it was even shown that students do not approve of the term consent. The study asked couples directly if they established consent, which they denied. Couples proceeded to describe establishing consent through more indirect methods, separating the term “consent” from its definition. The word is rejected, and students proceeded to explain how they establish consent, but refuse to title it “consent,” or recognize that their communications qualify as such (Beres, 2014). This could solely be due to the fact that they conceptualize consent as a more direct method and, as this is less favorable to college students, they claim to not establish it. This points to a lack in sexual consent education.

Sexuality education prior to college protects incoming students from sexual assault (Santelli, 2018). In a recent study by Willis and colleagues (2019), two of eighteen states in the United States directly addressed the term “consent” in their sexuality education curriculum in K-12 school year. Other states addressed consent related themes without explicitly mentioning the term, while some had no discussion of sex or sexuality at all and no sexuality education curriculum. The study highlights the importance of a comprehensive sexuality education that

contains information regarding sexual consent to improve individual advocacy for students' bodily autonomy, including refusal skills and knowledge on identifying appropriate and inappropriate behaviors, as well as many other important learning opportunities and skills. Additionally, it points to other areas of the health curriculum in which these topics can fit when the current sexuality education standards fail to encompass these important proficiencies. This calls for more sexual consent education in school years before college education as, first, it can serve as a protective factor against assault, and second, it may help to dismantle negative stigmas towards explicit, verbal consent (Willis et al., 2019).

Studies have also examined a more student-led approach to sexual consent education in college (Ortiz & Shafer, 2018; Ortiz et al., 2015). It was found that this approach can be effective in dispersing sexual consent information and opening positive discussion about the topic. Additionally, it was reportedly successful at reaching college aged men, who are a difficult demographic to reach with this information (Ortiz & Shafer, 2018). The collaboration of expert knowledge, such as professors trained in the area, and student involvement to lead the campaigns and spread knowledge, has also been found to successfully increase awareness regarding sexual consent, more visibility for the campaign itself, and greater student involvement (Ortiz et al., 2015).

There is also the issue of wanting versus willing which leads to ambiguous thoughts when deciding whether to engage in a sexual activity (Peterson & Muehlenhard, 2007). There may be aspects of the situation that establish want, the desire to engage in the sexual activity, and willing, the process of deciding whether the activity would be suitable in the situation. There may be both want and willing, neither, or one or the other. When one is present and the other is not, it leads to confusion and inner conflict. Perhaps one does not have the desire to have sex, but

they are attempting to get pregnant, or one does have the desire to have sex, but they know they should study for a test the next day (Peterson & Muehlenhard, 2007). These internal conflicts make consent difficult to establish.

It is, despite the potential embarrassment, important to establish consent clearly and directly. Many studies have investigated issues of consent in heterosexual relationships. Men are often examined for their perspectives on consent scenarios as they are the most likely to commit assault (Jozkowski & Hunt, 2013). It was found that men often take a woman's "no" as passive. They justify this by explaining that a "no" is often just a nicety as to not seem "easy" and any indirect denials of consent can easily be overlooked as such. There are also studies that point out that some women do engage in what is known as "token resistance," where women will refuse consent, but truly want to continue. Whether due to embarrassment or shame caused by society's views on female sexuality, or perhaps cultural or personal values, there is hesitancy or refusal to articulate such desires. This can make it confusing to differentiate between true consent and can lead to dangerous situations (Jozkowski & Hunt, 2013). This is not to say that it is justified to ignore even indirect signals of consent. It is mentioned to emphasize the importance of direct consent in these situations. It is imperative that students establish consent in a manner that cannot be misinterpreted, and assumptions cannot be made regarding intention.

Regulatory Focus, Regulatory Fit, and Regulatory Non-fit

Regulatory focus orientations involve differences in how people engage in self-regulation and goal pursuit (Higgins, 1998). The two specified orientations are prevention focus and promotion focus. Prevention focused individuals are concentrated on avoiding losses and maintaining positive outcomes. They value security and duty, engage in behaviors that align with these values, and use vigilant strategies to achieve their goals (Higgins et al., 2010). For

example, a prevention focused individual may exercise to avoid disease or to prevent loss of muscle mass or prevent feelings of unhealthiness. Promotion focused individuals aim to achieve gains. They value growth and achievement, engage in behaviors that align with these values, and use achievement-oriented strategies to accomplish their goals. For example, a promotion focused individual may exercise to gain more muscle mass, attain healthy body standards, or receive pleasure from the activity. Both regulatory focus orientations represent mentalities to achieve goals, but promotion focus is concerned with the pleasure of benefits and gains, while prevention focus is concerned with the pain of costs and losses.

Regulatory focus has been studied in various aspects regarding health, relationships, conflict resolution, and much more (Leonardelli et al., 2007; Winterheld & Simpson, 2011; Blalock et al., 2015; Keller, 2006), but important to the present research, it has been examined in the context of message framing. The main aim of this study is to draft messages to encourage students to use direct, verbal consent using regulatory focus orientations.

The message itself may induce certain orientations in individuals depending on the construal of the effects of the behaviors (Cesario, 2013). For example, a behavior such as getting a check-up at the doctor may, in itself, be more prevention focused, inducing a prevention focus in participants regardless of chronic orientation. The reverse may be true as well. A behavior may have the capability to represent both a prevention and promotion focus orientation. In this case, the chronic regulatory focus orientation may play a more prominent role than the behavioral domain (Cesario, 2013). For the present study, we examine only the chronic regulatory focus of participants.

The concept of regulatory fit addresses whether a persuasive message aligns with one's regulatory focus orientation (Fridman et al., 2016). A promotion focused individual reading a

message tailored to appeal to achieving gains and growth would be experiencing regulatory fit. A promotion focused individual reading a message meant to highlight avoiding losses and pain would be experiencing non-fit.

According to regulatory fit theory, when fit is established, individuals have increased performance and more motivation to stick with goals and feel “right” about complying with message recommendations (Higgins et al., 2010). A message of regulatory fit has also been supported to increase attitudes towards wanted behaviors and influence decision making. Fit encourages individuals to feel that performing a given task will allow them to complete their goals (Higgins, 2005). Even in instances where an activity orientation is highlighted as either fun or serious, participants were found to freely engage in the activity that most suited their orientations (Higgins et al., 2010). Additionally, a study looking into the effect of involvement, or importance regarding a message’s target, found that when there is high involvement, regulatory fit results in enhanced reactions towards positive advocacy (encouraging the increase of certain behaviors) and negative advocacy (encouraging the decrease of certain behaviors) messages and increased overall positive evaluations (Avnet et al., 2013).

With regard to regulatory non-fit when the encouraged behavior is not preferable or attractive to an individual, a message of non-fit may be more persuasive (Fridman et al., 2016). In a study focusing on the attitudes of participants choosing hospice care, a message of non-fit allowed the individual to consider the argument more thoroughly and think about the information given rather than rely on gut or react emotionally. Participants reported greater attitude change towards hospice care and more satisfaction regarding their decision. This remained true even in a second study where participants with actual hospice care experience were used. Those with negative attitudes towards hospice care reported higher increased attitudes when they received a

message of non-fit (Fridman et al., 2016). Additionally, non-fit has been found to increase attitudes towards negative advocacy messages when the target of the message is of low importance to them (Avent et al., 2013). While regulatory fit aligns with one's goal orientation to allow them to feel "right" about performing a behavior, non-fit gives a differing perspective on a behavior that may be far less preferable. Non-fit may relate to the feeling of the unexpected or being surprised which may allow individuals to reconsider their current stance on a behavior they may not particularly enjoy or have intentions of engaging in. For this reason, we believe a message of non-fit may be more beneficial in increasing positive attitudes towards sexual consent.

The Present Research

The purpose of this project is to encourage people to partake in safer sexual consent practices. As previously discussed, research highlights that while most students would rank direct verbal consent as most indicative of consent, when asked to rank what tactics they personally use to establish consent, they rank indirect methods or passivity as the highest (Hall, 1998). Due to the fact that students likely do not enjoy establishing consent verbally and may find it uncomfortable, we suspect that non-fit may aid in creating a more persuasive message. Our hypothesis was that a message of non-fit would lead to more positive sexual consent attitudes. That is, regulatory focus will moderate the relationship between message framing and sexual consent such that individual will have a more positive sexual consent attitudes when given a message of that does not fit their dispositional regulatory focus. In this study, aspects of fit, regulatory focus, message framing and sexual consent were investigated in two separate samples. One reflected a college population while the other was a general sample of adults from multiple stages of life and education.

Study 1

Method

Participants

Participants were recruited through SONA, the university's psychology research recruitment system. The SONA sample was collected from students currently attending the University of North Florida. Many were offered course credit for completion of a specific number of SONA credits but were not directly reimbursed for their participation by the researchers. Participants from this sample range from ages 18 – 45. Various ethnicities were represented, including White (60.2%), Hispanic and Latino (11.6%), Black and African American (8.3%), Asian (4.1%), Native American and Alaskan Native (0.8%), more than one (13.7%) and other ethnicities that were not listed (1.2%). Participants were also asked to report their sexual orientation with a majority of heterosexual participants (68%) and genders with a majority of female participants (80.1%) (see Table 1 for full participant characteristics). Participants who took less than 5 minutes to complete the survey or did not complete it in full were excluded from analyses.

Analysis in GPOWER (Erdfelder & Buchner, 1996) with an alpha of 0.05 and power of 0.80 determined a sample of 259 participants was necessary to detect an increase in R^2 due to an interaction of 0.03. Two hundred and forty-one participants submitted usable data for this study. Many participants completed the survey in less than 3 minutes or were not able to complete it in full during the time the survey was posted via the SONA system.

Materials and Measures

Means, standard deviations, skew and kurtosis of the dependent variables? Are presented in Table 2.

Sexual Consent Attitudes. Participants completed measures pertaining to sexual consent attitudes using the Sexual Consent Scale- Revised (Humphreys & Brousseau, 2010). This is a 39-item scale, measured on a Likert scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*). It contains 5 subscales: (lack of) perceived behavioral control (e.g., “I would have difficulty asking for consent because it would spoil the mood”), positive attitude toward establishing consent (e.g., “I feel that consent should be obtained before the start of any sexual activity”), indirect behavioral approach to consent (e.g., “Typically I communicate consent to my partner using nonverbal signals and body language”), sexual consent norms (e.g., “I think that obtaining consent is more necessary in a new relationship than in a committed relationship.”), and awareness and discussion (e.g., “I have discussed sexual consent issues with friends”). The scale has high internal consistency, test-retest reliability, and construct validity (Humphreys & Brousseau, 2010).

Sexual Consent Intentions. Participants completed the Consent to Sex scale to measure intention of sexual consent practices (Jozkowski & Peterson, 2014). This scale is a 44 item Likert scale (1 = *Strongly Disagree*, 4 = *Strongly Agree*) with 5 subscales: nonverbal signs of interest (e.g., “I would let my partner know through my actions to show comfort with the behavior”), passive behaviors (e.g., “I would not say no”), initiator behavior (e.g., “I would initiate sexual behavior”), verbal cues (e.g., “I would tell my partner what types of sexual behavior I want to engage in”), removal barriers (e.g., “I would take my partner somewhere private”). The relationship between subscales was found to be moderate to strong. It has high internal consistency reliability (Jozkowski & Peterson, 2014).

Revised Sociosexual Orientation Inventory. Preliminary information regarding sexual activity and attitudes toward behaving sexually were collected using the Revised Sociosexual Orientation Inventory (SOI) (Penke & Asendorpf, 2008). This questionnaire contains nine items with questions varying in measurement. The first three contain direct questions regarding personal sexual activity such as “With how many different partners have you had sex within the past 12 months?”. The next three contain statements such as, “Sex without love is OK” and ask participants to report agreement on a Likert scale (1 = *Strongly Disagree*, 9 = *Strongly Agree*). The last three contain questions regarding sexual activity and commitment with questions such as, “In everyday life, how often do you have spontaneous fantasies about having sex with someone you have just met?” and use nine report options.

Regulatory Focus Questionnaire. One of the measures of chronic regulatory focus orientation used in the study was the Regulatory Focus Questionnaire (RFQ) (Higgins et al., 2001). The RFQ is an 11-item scale, measured on a Likert scale (1 = *Never or Seldom*, to 5 = *Very Often*). Example questions include, “How often have you accomplished things that got you ‘psyched’ to work even harder?” which represents a promotion focused orientation, and “How often did you obey rules and regulations that were established by your parents?” which represents a prevention focused orientation.

International Personality Item Pool Regulatory Focus Scale. The International Personality Item Pool (IPIP) Regulatory Focus Scale was the other measure of chronic regulatory focus (Fuglestad et al., 2014). The IPIP is an 18-item scale, measured on a Likert scale (1 = *Strongly Disagree*, 3 = *Neither Agree nor Disagree*, 5 = *Strongly Agree*). Participants were asked to use the scale to identify the degree with which they agree or disagree that the items represent them. Example items include, “Behave properly” and “Am careful to avoid mistakes” for a more

prevention focus and, “Remain hopeful despite challenges” and “Like to begin new things” for a more promotion focus.

Means were established for both orientations. For the primary analysis, the prevention mean was subtracted from the promotion mean to represent regulatory focus such that lower scores indicated a more prevention focus and higher scores indicated a more promotion focus.

Promotion and Prevention Focused Messages. The prevention focus message emphasized the costs and losses of not using direct consent, whereas the promotion focus message highlighted the benefits and gains of using direct consent practices. For prevention focus, the message read:

Most students rate direct, verbal consent—clearly stating that you would like to engage in a particular sexual activity—as the most efficient way to establish consent, but also the least used. Students find it unnecessary and awkward. It is, however, important to use clear verbal means to establish consent. This can prevent miscommunications through unclear body language or words that hold a different meaning to both parties. Using this method can help to prevent unwanted sexual experiences by both parties and avoid causing damage to relationships with uncomfortable or harmful encounters caused by unclear messages and intentions. It may seem awkward or uncomfortable, but the costs of not establishing direct, verbal consent are clear, and, in the long run, detrimental to oneself and others.

For promotion focus, the message read:

Most students rate direct, verbal consent—clearly stating that you would like to engage in a particular sexual activity—as the most efficient way to establish consent, but also the least used. Students find it unnecessary and awkward. It is, however, important to use clear verbal means to establish consent. This can lead to stronger relationship communication and assist you

in achieving what you want to from the experience. This method can also make you and your partner feel closer and more comfortable with the experience as both of you are sure what is wanted and acceptable. It may seem awkward or uncomfortable, but the benefits of direct, verbal consent are clear, and, in the long run, favorable to oneself and others.

Message Importance. The perceived importance and quality of the messages was measured using the Importance of Cause Message Measure (Menon & Kahn, 2003). This is a 7-item scale, measured on a Likert scale ranging from 1 to 9 with various anchors depending on each item. The measure addresses elements of message importance (e.g., “The issue addressed in this message is serious and relevant”; 1 = *disagree strongly*, 9 = *agree strongly*) and quality (e.g., “Overall evaluation of the cause message”: 1 = *very unfavorable*, 9 = *very favorable*).

Procedures

The first study measured chronic regulatory focus orientations and the effect of the messages on them. Participants were asked to complete regulatory focus assessments and measures related to sexual consent knowledge and attitudes. They were then either presented with the promotion focused message or the prevention focused message. Afterwards, participants retook the sexual consent subscales pertaining to lack of perceived control, positive attitudes, and verbal cues to determine if the message was effective in increasing their positive attitude towards direct, verbal consent. Informed consent was received by all participants included in the analyses. Participants were treated in accordance with ethical guidelines outlined by the American Psychological Association (APA). All measure and procedures were approved by the Institutional Review Board at the University of North Florida.

Data Analysis Plan

To investigate mean differences based on participant demographic data, Independent Samples *t*-tests and ANOVAs were run. Correlations were run for all measures, including both the IPIP and RFQ regulatory focus measures, the SOI, the message importance scale, and all sexual consent measures. Using Model 1 in the PROCESS macro for SPSS, we investigated the interaction of message type and dispositional regulatory focus on message evaluation and sexual consent attitude/intention changes (lack of perceived control, positive attitude, and use of verbal cues). Model 3 in the PROCESS macro for SPSS was also utilized to conduct exploratory analyses. For these analyses, initial attitude and SOI were examined as potential moderators of the primary analysis interactions. In these analyses, message type was the primary predictor, dispositional regulatory focus was the first moderator, and initial attitude (or SOI) was the second moderator. The dependent variables were the post-message measures of message importance, lack of perceived control, positive attitudes, and use of verbal cues.

Results and Discussion

Correlations Among Study Variables

Correlations were run for all measures to test for potential relations between variables and to verify all measures were accurately coded. Means, standard deviations, skew and kurtosis were collected and represented in Table 3 for all measures. There were abnormally high skew and kurtosis levels for multiple measures that presented issues with normality in the data. This was likely due to the generally high attitudes toward consent measures. Those who scored higher in lack of perceived control scored lower in positive attitudes, verbal cues, message importance, awareness and discussion, and non-verbal cues. This indicates that those participants who scored higher in lack of perceived control were less confident in discussing and establishing consent and had less favorable views toward consent and establishing it in either verbal or non-verbal ways.

Those with a more prevention focus negatively correlated with the SOI and removal behaviors, or behaviors that removed obstacles to a situation that would be more suitable for a sexual interaction. Individuals with a more promotion focus tended score lower in lack of perceived control and higher in indirect, non-verbal, and removal behaviors.

The SOI was positively correlated with non-verbal cues, passive behaviors, initiator behaviors, and verbal cues. In this respect, it appears that those who engaged in, or were more comfortable with, more sexually promiscuous behaviors tended to have more confidence in their ability to obtain and establish consent in various ways.

Positive attitudes were negatively associated with indirect behaviors and initiator behaviors and positively related to verbal cues and awareness and discussion. Verbal cues were positively associated with the most of the other consent measures.

Mean Differences for Study Variables Based on Person Characteristics

Relationship Status. With regard to lack of perceived control in establishing consent, those in single or dating relationships scored higher ($M = 1.75$, $SD = 0.71$) than those in a serious or married relationship ($M = 1.57$, $SD = 0.65$), $t(235) = 2.40$, $p = 0.017$. This was replicated when reviewing the post messages scores for lack of perceived control with the single or dating participants still score higher ($M = 2.04$, $SD = 0.65$) than participants married or in a serious relationship ($M = 1.81$, $SD = 0.54$), $t(235) = 2.92$, $p = 0.003$. This indicates that single and dating individual reported statistically significant higher levels of a lack of confidence that they would be comfortable obtaining consent in a sexual situation.

For indirect behavioral approaches to sexual consent, participants that were married or in a serious relationship scored higher ($M = 3.75$, $SD = 0.82$) than those that were single or dating ($M = 3.26$, $SD = 0.86$), $t(235) = -4.35$, $p < 0.001$. These results indicate that individuals that were

married or in a serious relationship reported more likely to report that they engaged in indirect behaviors to obtain consent from their partner.

For non-verbal cues of sexual consent, participants that were married or in a serious relationship scored higher ($M = 4.51$, $SD = 0.65$) than those that were in a single or dating relationship ($M = 4.21$, $SD = 0.81$), $t(235) = -3.08$, $p = 0.002$. These results indicate that participants in a married or serious relationship were statistically significantly more likely to report use of non-verbal cues to acquire sexual consent from a partner.

For initiator behaviors, participants that were married or in a serious relationship scored higher ($M = 3.74$, $SD = 1.05$) than those that were in a single or dating relationship ($M = 3.36$, $SD = 1.12$), $t(235) = -2.64$, $p = 0.009$. These results indicate that those in a married or serious relationship were more likely to report engaging in physical behaviors that would initiate a sexual interaction with their partner.

For the SOI, those in single or dating relationships scored higher ($M = 3.78$, $SD = 1.54$) than those in a serious or married relationship ($M = 3.19$, $SD = 1.37$), $t(235) = 3.05$, $p = 0.003$. This indicates that participants in a single or dating relationship were more likely to report higher number of sexual partner and/or comfortability with sexuality and promiscuity.

Sexual Orientation. For awareness and discussion in regard to sexual consent, heterosexual participants scored lower ($M = 4.68$, $SD = 1.37$) than those of other sexual orientations ($M = 5.45$, $SD = 1.27$), $t(239) = -2.51$, $p = 0.013$. This indicates that heterosexual participants had a tendency to report less discussions with partners, friends or family regarding sexual consent and less awareness.

Positive attitudes towards sexual consent demonstrated that heterosexual participants scored lower ($M = 4.16$, $SD = 0.68$) than those of other sexual orientations ($M = 4.39$, $SD =$

0.52), $t(239) = -2.82, p = 0.005$. This indicates that heterosexual participants reported fewer positive attitudes regarding sexual consent and establishing it with partners than those belonging to another sexual orientation.

For the subscale on verbal cues regarding sexual consent, heterosexual participants scored lower ($M = 4.14, SD = 0.75$) than those of other sexual orientations ($M = 4.36, SD = 0.68$), $t(239) = -2.20, p = 0.029$. This indicates that those of other sexual orientations reported using more, and being more comfortable with, verbal cues to establish sexual consent. These results were replicated in the verbal consent measure given after the regulatory focus messages where participants that reported being heterosexual scored lower ($M = 4.24, SD = 0.75$) than those of other sexual orientations ($M = 4.52, SD = 0.67$), $t(239) = -2.91, p = 0.004$.

Those that reported being heterosexual also scored lower on the SOI ($M = 3.30, SD = 1.49$) than those of other sexual orientations ($M = 4.05, SD = 1.36$), $t(239) = -3.75, p < 0.001$. This indicates that those of a non-heterosexual orientation were more likely to report being comfortable with or engaging in activities that reflected more sexual promiscuity.

Gender. With regard to lack of perceived control, males tended to report higher scores ($M = 1.91, SD = 0.75$) than females ($M = 1.62, SD = 0.67$), $t(231) = 2.31, p = 0.025$. This was replicated in the similar measure following the regulatory focus messages in that males reported higher scores ($M = 2.23, SD = 0.69$) than females ($M = 1.89, SD = 0.58$), $t(231) = 2.86, p = 0.006$, with regard to lack of perceived control. This indicates that males reported lacking confidence in obtaining sexual consent from a partner before engaging in a sexual activity.

For awareness and discussion regarding sexual consent, males reported lower scores ($M = 4.21, SD = 1.51$) than females ($M = 4.93, SD = 1.30$), $t(231) = -3.13, p = 0.002$. These results

indicate that females were more comfortable discussing sexual consent with partners, friends, or family, and confident in their awareness of the topic.

With regard to non-verbal cues, males scored lower ($M = 3.99$, $SD = 0.91$) than females ($M = 4.42$, $SD = 0.70$), $t(231) = -3.30$, $p = 0.001$. This demonstrates that females reported more comfort expressing consent through non-verbal cues than males in the study.

With regard to verbal cues, males tended to score lower ($M = 3.89$, $SD = 0.75$) than females ($M = 4.28$, $SD = 0.70$), $t(231) = -3.21$, $p = 0.002$. This is replicated in the second, post messages, measure of verbal cues where males also scored lower ($M = 3.88$, $SD = 0.92$) than females ($M = 4.42$, $SD = 0.66$), $t(231) = -3.52$, $p < 0.001$. This indicates that females reported more comfort and confidence establishing consent through verbal cues than males.

Positive attitude towards consent was also statistically lower in males ($M = 3.85$, $SD = 0.82$) than in females ($M = 4.20$, $SD = 0.58$), $t(231) = -3.29$, $p = 0.002$. This is also reflected in a similar message after the messages where males scored lower ($M = 3.85$, $SD = 0.89$) than females ($M = 4.40$, $SD = 0.55$), $t(231) = -3.74$, $p < 0.001$. This indicates that females reported more positive opinions and attitudes towards sexual consent and establishing it with partners.

With regard to message importance, male participants reported lower scores ($M = 6.81$, $SD = 1.44$) than females ($M = 7.68$, $SD = 1.11$), $t(231) = -3.62$, $p < 0.001$. This demonstrates that females reported higher, and more frequently, that the messages pertaining to the importance of establishing sexual consent verbally were valuable and effective.

Education. For indirect behavioral approaches, participants in their 1st year of college reported lower scores ($M = 3.18$, $SD = 0.83$) than those in their 2nd ($M = 3.67$, $SD = 0.89$), $p = 0.038$, and 3rd years ($M = 3.57$, $SD = 0.83$), $p = 0.039$, $F(4, 236) = 2.92$, $p = 0.022$. This indicates

that those in their 1st year of college reported less comfort and confidence in using indirect behaviors to establish sexual consent than those in their 2nd and 3rd year.

For non-verbal cues, those in their 1st year of college reported lower scores ($M = 4.06$, $SD = 0.97$) than those in their 3rd ($M = 4.23$, $SD = 0.61$), $p = 0.022$, and 4th years ($M = 4.52$, $SD = 0.60$), $p = 0.007$, $F(4, 236) = 3.76$, $p = 0.006$. This indicates that those in their 1st year of college reported less comfort and confidence in using non-verbal cues to establish sexual consent than those in their 3rd and 4th year of college.

For the SOI, those in their 1st year of college reported lower scores ($M = 3.21$, $SD = 1.53$) than those in their 4th ($M = 4.03$, $SD = 1.65$), $F(4, 236) = 6.53$, $p = 0.018$. This indicates that participants in their 1st year of college reported less comfort with, and less acts, of sexual promiscuity than those in their 4th year of college.

For message importance, those in their 1st year of college reported lower scores ($M = 7.08$, $SD = 1.05$) than those in their 4th ($M = 7.16$, $SD = 1.48$), $F(4, 236) = 4.09$, $p = 0.022$. This indicates that those in their 1st year of college reported less perceived value and effectiveness of the messages pertaining to establishing sexual consent verbally than those in their 4th year of college.

For positive attitudes, but only after the messages were presented, 1st years reported higher scores ($M = 4.51$, $SD = 0.53$) than those in their 4th ($M = 4.17$, $SD = 0.85$), $F(4, 236) = 1.10$, $p = 0.033$. This indicates that after the messages encouraging establishing sexual consent verbally were presented, 1st years reported more positive attitudes and opinions toward sexual consent than those in their 4th year of college.

Primary Analysis

None of the Model 1 analyses with yielded significant results as illustrated in Figures 1 and 2. This indicates that there was no significant interaction between the consent messages and dispositional regulatory focus in predicting message evaluation and changes related to consent attitudes and intentions. This did not support our hypothesis that regulatory focus would moderate the relationship. There were also no significant main effects. Messages of fit and non-fit had no significant effect on any of our potential outcome variables, including lack of perceived control, positive attitude, verbal cues, and message importance. This was consistent with both RFQ and IPIP as indices of regulatory focus.

In general, based on means for the consent measures, it seems the initial assumption that college students would have more negative attitudes toward sexual consent, and particularly direct, verbal consent, was incorrect. The majority of the sample demonstrated high positive attitudes and intentions regarding sexual consent. Message importance ratings were also quite high. Relatedly, consent variable changes were relatively small (as seen in the descriptive data), which potentially limits our ability to detect the effects of fit and non-fit.

Exploratory Analyses

Exploratory analyses were run with the intention of investigating whether initial attitudes and individual's sociosexual orientations would influence the effects of message type based on dispositional regulatory focus. In this way, the effects of fit and non-fit could be examined based on participants initial attitudes about direct, verbal consent and their sociosexual orientations. Results reported below use the RFQ as the indicator of regulatory focus (results using the IPIP were either similar to those below or non-significant). In this sample, SOI did not act as a moderator of the interactive effects of message and dispositional regulatory focus.

With respect to post message lack of perceived control, the 3-way interaction between message, regulatory focus, and initial attitude was marginal, $F(1, 235) = 2.82$, $\Delta R^2 = 0.01$, $p = 0.094$, 95% CI [-0.03, 0.42]. The pattern of results indicated that for those who scored lower in initial positive attitude, a message that fit their regulatory focus was related to perceptions of greater control, $F(1, 235) = 2.60$, $p = 0.108$, $b = -0.17$ (see Figure 3). For those with higher initial attitudes, message type and regulatory focus did not interact to influence perceived control, $F(1, 235) = 0.46$, $p = 0.498$, $b = 0.06$.

With respect to post message verbal cues as the outcome variable, the 3-way interaction between message, regulatory focus, and initial attitude was marginal, $F(1, 234) = 2.34$, $\Delta R^2 = 0.01$, $p = 0.128$, 95% CI [-0.50, 0.06]. Although the interactions of message and regulatory focus were of opposite directions based on initial attitude, neither was significant: lower initial positive attitudes, $F(1, 234) = 0.75$, $p = 0.387$, $b = 0.11$; higher initial positive attitudes, $F(1, 234) = 1.71$, $p = 0.192$, $b = -0.16$. As depicted in Figure 4, the results suggest that for people with a more prevention focus, fit may have been beneficial for those with less positive attitudes and that non-fit may have been beneficial for those with more positive attitudes. People with a more promotion focus did not seem to differ based on fit. The 3-way interaction did not approach significance for message importance, $p = .86$, or post positive attitude, $p = .84$.

In sum, exploratory analyses suggested that a message of fit may have led to positive changes for those with lower initial attitudes. Those with more positive attitudes did not to demonstrate any significant changes, but the pattern seemed to show that a message of non-fit may potentially be beneficial.

Study 2

An additional sample was collected to represent a more varied population than the college sample of the first study. Data collected in the initial study allowed for comparison to previous research that has a strong focus on the college population. This additional sample allowed for comparison between age and education groups in attitude differences regarding sexual consent.

Method

Participants

Participants for Study 2 were recruited via Amazon's Mechanical Turk (MTurk) and were required to have an approval rating of at least 99% with 50 or more approved jobs as indicated by MTurk. This sample of 309 participants ranged from ages 19 – 73 with similar diversity to Study 1 (Table 4). Participant ethnicities included White (79.5%), Hispanic and Latino (2.7%), Black and African American (11.4%), Asian (2.2%), Native American and Alaskan Native (0.5%), and those represented by more than one (3.8%). This sample had a majority male (67.7%) and heterosexual (70.4%) representation. These participants were anyone capable of creating an account in the United States and were reimbursed in the amount of \$1 for their participation. Participants who took less than 5 minutes to complete the survey or who did not complete the survey in full were removed from analyses.

Procedures

Measures and procedures were kept nearly identical to the first study. Some differences were present. This study contained a different sample of individuals that did not limit us to only the college student population. In addition, to prevent an unsuccessful data collection, we removed non-essential measures (those that were not used in the primary analysis) and reduced the survey duration significantly before collecting data. Study 2 only measured Positive Attitudes

and Verbal Cues as measures of sexual consent attitudes, but still contained all of the Regulatory Focus measures, the messages, demographics, message importance and SOI measure. There were minor changes to certain demographic data, such as education that was changed to encompass individuals that did not attend college or that had completed college. Data analysis remained the same. Means, standard deviation, skew and kurtosis are represented in Table 5.

Promotion and Prevention Focused Messages

The messages were slightly altered in study 2. The promotion focus message highlighted the benefits and gains of using direct consent practices, whereas the prevention focus message emphasized the costs and losses of not using direct consent. For prevention focus, the message read:

Most people rate direct, verbal consent—clearly stating that you would like to engage in a particular sexual activity—as the most efficient way to establish consent, but also the least used. People can find it unnecessary and awkward. It is, however, everyone’s responsibility to use clear verbal means to establish consent. This can prevent miscommunications through unclear body language or words that hold a different meaning to both parties. Using this method, can help to prevent unwanted sexual experiences by both parties and avoid causing damage to relationships with uncomfortable or harmful encounters caused by unclear messages and intentions. It may seem awkward or uncomfortable, but the costs of not establishing direct, verbal consent are clear, and, in the long run, detrimental to oneself and others.

For promotion focus, the message read:

Most people rate direct, verbal consent—clearly stating that you would like to engage in a particular sexual activity—as the most efficient way to establish consent, but also the least used. People can find it unnecessary and awkward. It is, however, quite beneficial to use clear

verbal means to establish consent. This can lead to stronger relationship communication and assist you in achieving what you want to from the experience. This method can also make you and your partner feel closer and more comfortable with the experience as both of you are sure what is wanted and acceptable. It may seem awkward or uncomfortable, but the benefits of direct, verbal consent are clear, and, in the long run, favorable to oneself and others.

Results and Discussion

Correlations Among Study Variables

Correlations were run for all measures to test for potential relations between variables (Table 6). Promotion focus was positively related to attitudes and verbal cues and message importance. Prevention focus was positively related to message importance.

The SOI was positively associated with both promotion and prevention but not with sexual consent variables. Consent measures (positive attitudes and verbal cues) correlated significantly with each other and message importance.

Mean Differences for Study Variables Based on Person Characteristics

Sexual Orientation. For the SOI, participants of a heterosexual orientation scored lower ($M = 4.60$, $SD = 1.18$) than those of other sexual orientations ($M = 5.67$, $SD = 1.39$), $t(307) = -6.38$, $p < 0.001$. This indicates that participants of a heterosexual orientation engaged in less, and were less comfortable, with acts of promiscuity.

For message importance, heterosexual participants scored lower ($M = 6.80$, $SD = 1.06$) than those of other sexual orientations ($M = 7.26$, $SD = 1.25$), $t(307) = -3.00$, $p = 0.003$. This indicates that participants that were not heterosexual reported that the messages encouraging establishing consent through verbal cues were more valuable and effective.

Relationship Status. For positive attitudes after the message was given, participants that were in a single or dating relationship scored higher ($M = 4.31$, $SD = 0.60$) than those who are in serious or married relationships ($M = 4.09$, $SD = 0.63$), $t(304) = 2.64$, $p = 0.009$. This indicates that those that are single or dating had higher positive attitudes towards establishing sexual consent.

Gender. For the SOI, male participants scored higher ($M = 5.03$, $SD = 1.19$) than female participants ($M = 4.63$, $SD = 1.41$), $t(307) = 2.63$, $p = 0.009$. This indicates that male participants reported being more comfort and more engagement with sexually promiscuous acts.

For positive attitudes after the messages had been shown, female participants scored higher ($M = 4.00$, $SD = 0.61$) than male participants ($M = 3.82$, $SD = 0.71$), $t(307) = -2.38$, $p = 0.018$. These results indicate that female participants reported more positive attitudes regarding establishing sexual consent.

Education. Study 2 had a more varied population than Study 1 and was not limited to only current college students, therefore the education variable was expanded to include those that had finished, or did not attend, college.

For the SOI, those that reported their highest level of education as a high school diploma or equivalent scored lower ($M = 4.01$, $SD = 1.21$) than those with a Bachelor's degree ($M = 4.99$, $SD = 1.26$), $F(7, 300) = 3.33$, $p = 0.023$.

For positive attitudes, those that reported their highest level of education as a high school diploma or equivalent scored higher ($M = 4.27$, $SD = 0.81$) than those with a Bachelor's degree ($M = 3.79$, $SD = 0.64$), $F(7, 300) = 2.74$, $p = 0.039$. This was mirrored in the positive attitude measure after the messages were presented in that those that had completed a high school diploma or equivalent reported higher scores ($M = 4.40$, $SD = 0.74$) than those with a Bachelor's

degree ($M = 3.82$, $SD = 0.63$), $F(7, 300) = 2.71$, $p = 0.005$. These results indicate that those with their highest level of education being a high school diploma or equivalent, reported more positive attitudes towards establishing sexual consent than those who had completed a Bachelor's degree.

Primary Analysis

Only one of the PROCESS Model 1 analyses yielded significant results when examining the interaction of message and dispositional regulatory focus. There was a significant interaction for the analysis in which regulatory focus moderated the relation between sexual consent messages and positive attitude change, $t(305) = 2.96$, $p = 0.003$, $\Delta R^2 = 0.03$, as depicted in Figures 5 and 6. This significant interaction was in contrast to our primary hypothesis that a message of non-fit would benefit the change in participant attitudes toward direct, verbal consent. Instead, the analysis shows a message of fit resulted in greater difference in sexual consent attitudes. Participants with a more promotion focus demonstrated greater positive attitude change regarding sexual consent when given a message written containing more promotion focused language, whereas participants with a more prevention focus demonstrated greater positive attitude change regarding sexual consent when given a message written to appeal to someone of prevention focus. Conditional effects of message were significant for those with a more promotion focus, $t(305) = 2.41$, $p = 0.020$, $b = 0.12$, 95% CI [0.02, 0.22]; the effect was in the opposite direction for those with a more prevention focus, $t(305) = -1.75$, $p = 0.082$, $b = -0.09$, 95% CI [-0.19, 0.01]. Other analyses investigating verbal cues and message importance, with both the RFQ and IPIP, did not yield significant results as shown in Figures 5 and 6.

Exploratory Analyses

Exploratory Analyses were run with the main intention of investigating interactions between the primary analysis variables with initial participant attitudes. These analyses were meant to determine if higher or lower attitudes toward sexual consent would lead to greater attitude change when presented a message of fit or non-fit. SOI was also examined as a potential secondary moderator. Results reported below use the RFQ as the indicator of regulatory focus (results using the IPIP were either similar to those below or non-significant).

With respect to positive attitude change, the 3-way interaction of SOI, message, and regulatory focus was significant, $F(1, 301) = 4.92$, $\Delta R^2 = 0.02$, $p = 0.027$, 95% CI [-0.24, -0.01]. Conditional effects indicate that those who scored lower on the SOI demonstrated higher attitude change when shown a message of fit, $F(1, 301) = 11.80$, $p = 0.007$, $b = 0.31$. Those who scored higher in SOI demonstrated no significant interaction, $F(1, 301) = 0.03$, $p = 0.870$, $b = -0.02$. This indicates that a message of fit benefitted those with less positive attitudes toward sex and sexuality (Figure 8).

For message importance, the 3-way interaction of initial consent attitude, message, and regulatory focus was significant, $F(1, 304) = 7.07$, $\Delta R^2 = 0.02$, $p = 0.008$, 95% CI [-1.17, -0.18]. The pattern of results indicated that for those who scored lower in initial positive attitude, a message that fit their regulatory focus was related to higher ratings of message importance, $F(1, 304) = 6.37$, $p = 0.012$, $b = 0.64$. For those with higher initial attitudes, message type and regulatory focus did not significantly interact, $F(1, 304) = 0.84$, $p = 0.362$, $b = -0.24$; however, the pattern indicates that a message of non-fit may have been beneficial for people with a more prevention focus (Figure 9).

These results were similar with respect to post message verbal cues, $F(1, 304) = 6.34$, $\Delta R^2 = 0.01$, $p = 0.012$, 95% CI [-0.56, -0.07]. For those who scored lower in initial positive

attitude, message and regulatory focus interacted to predict verbal cues, $F(1, 304) = 5.57, p = 0.019, b = 0.30$. As depicted in Figure 10, a prevention message was beneficial for those with a more prevention focus. For those who scored higher in initial positive attitude, message and regulatory focus did not significantly interact, $F(1, 304) = 0.80, p = 0.372, b = -0.12$.

With respect to post message positive attitudes, the 3-way interaction of initial positive attitude, message, and regulatory focus was marginal, $F(1, 304) = 3.58, \Delta R^2 = 0.002, p = 0.059, 95\% \text{ CI } [-0.32, 0.01]$. For those who scored lower in initial positive attitude, message and regulatory focus interacted to predict post message positive attitude, $F(1, 304) = 11.5, p < 0.001, b = 0.28$. As depicted in Figure 11, messages that fit dispositional regulatory focus appeared to be beneficial. For those who scored higher in initial positive attitude, message and regulatory focus did not significantly interact, $F(1, 304) = 0.77, p = 0.381, b = 0.76$.

One of our primary analyses yielded significant results, but this did not support our hypothesis that a message of non-fit would encourage students to have better attitudes toward sexual consent. A message of fit was the only one that demonstrated any positive attitude change. Exploratory analyses also demonstrated that a message of fit led to greater attitude change for individuals who tended to have lower initial positive attitudes.

General Discussion

In general, the overarching hypothesis that non-fit messages would encourage positive change in attitudes and intentions related to verbal sexual consent was not supported. In contrast, as discussed extensively below, some of the evidence suggested that messages that fit with individuals' dispositional regulatory foci were beneficial in encouraging positive attitude change. Previous research indicates that students regard direct and verbal consent as unfavorable and "awkward" (Shumlich & Fisher, 2018). With this in mind, we hypothesized that a message of

non-fit may be best, as previous research has also indicated that a message of non-fit may perform better when the requested behavior is something the individual does not want to do. This concept may not have been supported for a few reasons.

The hypothesis for this project was based off of the assumption that those with negative attitudes would be shifted with a message of non-fit as previous research showed that a message of non-fit was beneficial to those with a strong negative attitude towards hospice care in encouraging them to attempt hospice care again (Fridman et al., 2016). In this research, we assumed that the non-fit was beneficial for any pre-existing negative attitude. Due to the research highlighting the negative attitudes of college students regarding sexual consent (Muehlenhard et al., 2016), we predicted that a message of non-fit would be helpful. Those with pre-existing negative attitudes towards sexual consent (at least behaviorally), which previous research suggested may be the majority of the population, would have had increased attitude change when presented with a message of non-fit. This hypothesis was not supported. The majority of both samples demonstrated high, initial attitudes towards direct, verbal sexual consent. It appears that our initial assumptions were incorrect and that a more correct interpretation of Fridman et al. (2016) may be that that any strong attitude, not just negative attitudes, would be more responsive to a non-fit message, whereas weaker attitudes would be more responsive to a fit message (Fridman et al., 2016; Avent et al., 2013). Exploratory analyses seemed to point towards this interpretation.

Additionally, the first study consisted of what can be assumed to be majority psychology undergraduates. The data was collected via the SONA research participation system from the University of North Florida. Many psychology courses offer optional course credit for participating in SONA studies. Although we did not collect data on participant's college major,

many of them may have been psychology students that are more aware of sexual consent and taught about these topics. This assumption from a sample of college students may have been better placed on a more varied one of different educational paths and ages.

With respect to analysis of mean differences based on person characteristics, it was supported that married or individuals in a serious relationship in study 1, relatively to single individuals, scored higher in various measures indicating positive attitudes toward indirect consent, including indirect behaviors, initiator behaviors, and non-verbal cues, and study 2 showed that single individuals had higher attitudes toward verbal consent after the messages were shown. Study 1 also demonstrated that single individuals scored higher in lack of perceived control. This could have been due to the fact that the those who are married or in a serious relationship have had more experience communicating with another individual regarding their sexuality. They also indicate having a serious commitment to the person they are with, which may allow a more natural and comfortable communication as opposed to those that report dating or being single who may either have less experience with sexual encounters or have experience with others with whom they have less fluent communication. This is not to say that excellent communication skills cannot be developed outside of a committed relationship, just that it may be less common and that those in a married or serious relationship may have these consensual conversations and encounters more often and more naturally. This partially contrasts previous literature that found individuals in long term relationships admitted to not establishing sexual consent as it was not necessary, but only in the short term. When asked to describe what they do to communicate during? a sexual encounter, they described establishing consent, but seemed to have distaste for the terminology (Beres, 2014).

When investigating gender differences, males reported higher lack of perceived control at both points of measure during study 1, while scoring higher than women in SOI during study 2. Females in study 1 scored higher than males on nearly all measures, including awareness and discussion, non-verbal cues, verbal cues before and after the messages, positive attitudes before and after the messages, and message importance. This demonstrates a significant difference in the attitudes of females regarding sexual consent as opposed to male attitudes. This may be due to the fact that females are more typically the victims and target of sexual assault and abuse. They may find it more important and necessary to advocate for consent in sexual situations to make boundaries clearer and ensure that they are safe. Although males can also be victims and targets of sexual assault, they may receive less cautions and encouragement to establish consent in sexual scenarios as these instances are less discussed. This aligns with the previous literature that indicates that females tend to be the victims of sexual assault (Mellins et al., 2017).

Sexual orientation also demonstrated a significant difference between heterosexual individuals and those of other sexual identities. Those of other sexual identities scored higher in awareness and discussion, positive attitudes, verbal cues before and after the messages, and the SOI, indicating more positive attitudes toward sexual consent than heterosexual individuals. Less research exists regarding the differences in sexual consent with regard to sexual orientation. This research emphasizes a need for more research in this demographic difference.

Differences in education, for the first study, focused only on the 1st through 4th years of college and indicated that those in their first year tended to have less positive attitudes toward consent, scoring lower in indirect behaviors, non-verbal cues, the SOI, and message importance than other grade levels. First years only scored higher in positive attitudes after the messages were presented. This may be due to the fact that 4th years may have had more sexual experiences

and more time to understand the importance in establishing sexual consent. First years are typically younger and perhaps have had less experience exploring their sexuality. This may make it more difficult to conceptualize sexual consent in situations that may be unfamiliar or less common for them.

For study 2, where education other than undergraduate college years was assessed, it was supported that those with a bachelor's degree had less positive attitudes before and after the messages were present than those with just a high school diploma, but scored higher in the SOI. This indicates that although those with a bachelor's degree may have participated in more sexually promiscuous behaviors or have more positive attitudes towards those experience, they have less positive attitudes toward direct, verbal sexual consent. Similar to study 1, this may just be due to the fact that those with a bachelor's degree may have lived longer and had more sexual experiences. Those with only a high school diploma may just be individuals that have just graduated high school and have not had the opportunity to experience dating and exploring their sexuality. Those with a college experience may be able to socialize more freely and have more opportunity to engage in sexual relationships. This aligns with previous research that references the first year of college as a time where sexual assault is most commonly perpetrated. First year college students tend to be individuals who have just recently become independent and gained freedom they may not have had at home, while simultaneously being exposed to new situations and experiences they are not familiar (Kuperberg & Padgett, 2015).

Strengths, Limitations, and Future Directions

This project did well to investigate multiple samples and to not only investigate college samples. Additionally, a large array of validated sexual consent variables were assessed. The project also examined the experimental utility of using messages that fit and do not fit with

people's self-regulatory dispositions. However, a number of limitations should be noted. The college sample was likely majority psychology majors as the University of North Florida's department of psychology uses participating in studies as a potential course credit for undergraduate students. These students may receive more exposure to sexual consent topics and understand the importance of communication in most situations more than the average adults in their age range and even students in other programs. Future studies would do well to investigate a more varied college population and specify various majors. Additionally, the first study did not have a sample large enough to achieve significant power for the analyses suggested. A larger sample size would be beneficial. A larger, more diverse sample may also help to achieve more variability with respect to sexual consent attitudes and behaviors. In the current studies, attitudes were generally quite positive, and most people expressed comfort with direct verbal consent. Of course, participant responses could have been influenced by social desirability concerns when expressing these attitudes. Future research could benefit from implicit measures of consent and potentially more behavioral and partner perspectives.

A longitudinal study would also be beneficial, in which participants are brought into a lab, given the measures and messages, and asked to come back at a later date to determine whether the messages were effective and allow more time in between repeats of the measures to determine if any attitude change found would hold up for a longer amount of time and become a consistent change. An initial pilot study, in which regulatory focus was meant to be induced, failed as the online participants did not participate fully in the induction and did not produce data that would be usable. The manipulation was not completed accurately and was, therefore, ineffective on our sample. In a lab setting, researchers could ensure appropriate completion of

the messages and test the differences between chronic and induced regulatory focus on the measures.

Implications for Regulatory Fit and Sexual Consent Education

This project highlights a need for research in the realm of regulatory fit. It expands upon the finding that non-fit may develop a more persuasive message for those with strong, pre-existing attitudes, but other research must be done to provide statistically significant findings. This research can be crucial in the creation of persuasive messages and advertisements for concepts that may be strongly disfavored, but necessary in our society or things that may be intensely well-liked, but harmful. It may be an instrumental tool in encouraging messages that contradict mass opinions that may be too powerful to be adjusted by messages of fit.

This project also provides more evidence toward the need for more effective methods of sexuality education for all individuals as a whole, as well as echoing the need for education regarding sexual consent. While we were not able to find the intensely negative attitudes towards sexual consent that were present, we did find gaps in attitudes in certain demographic areas. Many demographic areas, such as gender, sexual orientation, and relationship status, pointed to areas in need of sexuality education regarding consent. Experience may be an excellent teacher, but arming individuals with skills and tools to facilitate their experiences and prevent them from engaging in behaviors that are not consensual should be the aim. The goal should be to provide individuals with the skills necessary to communicate intentions and boundaries with their partners during sexual activities.

This project also supports that education is necessary prior to college. While study 2 may have indicated that those with a high school diploma had more positive sexual consent attitudes, study 1 showed that those in their 1st year of college had lower attitudes towards sexual consent.

Sexuality education should be required before individuals engage in sexual activity and especially before college.

Conclusion

Sexual consent is an increasingly crucial aspect of our daily lives. With the lacking mandatory education revolving around sex in general, with consent as a minor aspect of those teachings, we must be put focus into developing teaching methods and messages that are effective in teaching all individuals. Further research into what may and may not be effective in teaching individuals is necessary for the growth in sexuality education.

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Table 1*Study 1 Demographic Data (N = 241)*

Variables	<i>n</i> (%)	<i>M</i> (<i>SD</i>)
Age		20.78 (3.98)
Gender		
Male	40 (16.6%)	
Female	193 (80.1%)	
Non-Binary	8 (3.3%)	
Ethnicity/Race		
White	145 (60.2%)	
Hispanic/Latino	28 (11.6%)	
Black/African American	20 (8.3%)	
Asian	10 (4.1%)	
Native American/Alaskan Native	2 (0.8%)	
Other	2 (1.2%)	
More than one	33 (13.7%)	
College Year		
Freshmen	73 (30.3%)	
Sophomore	38 (15.8%)	
Junior	78 (32.4%)	
Senior	50 (20.7%)	
Completed College	2 (0.8%)	
Relationship Status		
Single	104 (43.3%)	
Dating	37 (15.4%)	
Serious Relationship	85 (35.4%)	
Married	11 (4.6%)	
Multiple	3 (1.3%)	
Sexual Orientation		
Heterosexual	164 (68%)	
Homosexual	8 (3.3%)	
Pansexual	9 (3.7%)	
Bisexual	54 (22.4%)	
Asexual	1 (0.4%)	
Other	5 (2.1%)	

Table 2*Study 1 Descriptive Statistics of Measures*

	<i>M</i>	<i>SD</i>	<i>SKEW</i>	<i>KURTOSIS</i>
IPIP Prevention	3.81	0.56	-0.64	1.21
IPIP Promotion	3.76	0.62	-0.61	0.30
IPIP Difference	-0.05	0.61	0.31	1.09
RFQ Prevention	3.47	0.65	-0.40	1.00
RFQ Promotion	3.23	0.93	-0.14	-0.79
RFQ Difference	0.23	1.03	0.26	0.30
SOI	3.52	1.49	0.59	-0.30
Message Importance	7.54	1.22	-0.79	-0.06
Positive Attitude	4.22	0.65	-1.07	1.08
Post Message Positive Attitude	4.30	0.66	-1.21	1.54
Positive Attitude Difference	0.82	0.44	-0.25	3.34
Verbal Cues	4.20	0.72	-0.86	0.49
Post Message Verbal Cues	4.32	0.74	-1.24	1.55
Verbal Cues Difference	0.11	0.39	-0.33	4.57
Lack of Perceived Control	1.68	0.70	1.35	1.65
Post Lack of Perceived Control	1.96	0.63	1.00	0.45
Lack of Perceived Control Difference	0.29	0.48	-0.14	2.93
Indirect Behaviors	3.45	0.87	-0.48	-0.03
Awareness & Discussion	4.82	1.36	-0.44	-0.43
Non-Verbal Cues	4.31	0.77	-1.47	2.54
Passive Behaviors	3.51	1.08	-0.53	-0.44
Initiator Behaviors	3.50	1.11	-0.62	-0.30
Removal Behaviors	4.20	0.86	-1.15	0.94

Table 3*All Measures Correlations from Study 1 (N = 241)*

	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00
1. IPIP Prevention	0.75	0.44**	0.46**	0.48**	-0.31**	-0.13	0.04	-0.02	-0.05	-0.15*	-0.06	0.00	-0.03	0.11	-0.15*	0.09	-0.01
2. IPIP Promotion		0.76	0.12	0.61**	-0.05	-0.07	0.17**	-0.02	0.13*	-0.03	0.14*	0.04	0.16*	-0.02	-0.04	-0.09	0.01
3. RFQ Prevention			0.81	0.19**	-0.26**	-0.09	0.06	-0.10	-0.09	-0.07	-0.01	-0.06	-0.13*	-0.04	-0.08	0.02	-0.01
4. RFQ Promotion				0.67	-0.04	-0.18**	0.11	0.07	0.09	0.02	0.06	0.08	0.12	-0.07	-0.15*	-0.04	0.01
5. SOI					0.83	-0.01	-0.01	0.27**	0.25**	0.21**	0.14*	0.15*	0.12	-0.01	0.04	-0.04	0.21
6. LOPC						0.87	0.13*	-0.28**	-0.13*	0.02	-0.05	-0.32**	0.01	-0.17**	0.74**	-0.36**	-0.01
7. Indirect Behaviors							0.80	-0.06	.049**	0.41**	0.48**	-0.04	0.22**	-0.21**	0.15*	-0.39**	0.01
8. Aware & Discuss								0.63	0.25**	0.12	0.15*	0.36**	0.09	0.24**	-0.24**	0.25**	0.41
9. Non-Verbal Cues									0.95	0.54**	0.57**	0.38**	0.49**	0.06	-0.11	0.03	0.41
10. Passive Behaviors										0.94	0.56**	0.14*	0.29**	-0.11	0.04	-0.11	0.31
11. Initiator Behaviors											0.93	0.38**	0.44**	-0.02	-0.03	-0.14*	0.31
12. Verbal Cues												0.89	0.38**	0.29**	-0.32**	0.39**	0.81
13. Removal Behaviors													0.80	0.05	-0.04	0.02	0.41
14. Message Importance														0.80	-0.30**	0.44**	0.31
15. Post LOPC															0.75	-0.42**	-0.01
16. Post Positive Attitudes																0.87	0.41
17. Post Verbal Cues																	0.01
18. Positive Attitudes																	

Note. ** $p < .01$, * $p < .05$. Cronbach's alpha is posted along diagonal. IPIP = International Personality Item Pool; RFQ = Regulatory Focus Questionnaire; SOI = Sociosexual Orientation Inventory; LOPC = Lack of Perceived Control.

Table 4*Study 2 Demographic Data (N = 309)*

Variables	<i>n</i> (%)	<i>M</i> (<i>SD</i>)
Age		37.79 (10.22)
Gender		
Male	166 (53.7%)	
Female	143 (46.3%)	
Ethnicity/Race		
White	259 (84.4%)	
Hispanic/Latino	7 (2.3%)	
Black/African American	15 (4.9%)	
Asian	16 (5.2%)	
Native American/Alaskan Native	1 (0.3%)	
More than one	9 (2.9%)	
Education Status		
Some High School (No Degree)	2 (6.0%)	
High School Degree or GED	20 (6.5%)	
Some College (No Degree)	26 (8.4%)	
Associate degree	15 (4.9%)	
Trade/Technical Degree	3 (1.0%)	
Bachelor's degree	204 (66.0%)	
Master's Degree	36 (11.7%)	
Doctorate Degree	1 (0.3%)	
Professional Degree	2 (0.6%)	
Relationship Status		
Single	52 (17.0%)	
Dating	23 (7.5%)	
Serious Relationship	35 (11.4%)	
Married	196 (64.1%)	
Sexual Orientation		
Heterosexual	239 (77.6%)	
Homosexual	11 (3.6%)	
Pansexual	3 (1.0%)	
Bisexual	52 (16.9%)	
Asexual	1 (0.3%)	
Other	2 (0.6%)	

Table 5*Study 2 Descriptive Statistics of Measures*

	<i>M</i>	<i>SD</i>	<i>SKEW</i>	<i>KURTOSIS</i>
IPIP Prevention	3.53	0.57	0.61	-0.27
IPIP Promotion	3.71	0.56	-0.19	0.50
IPIP Difference	0.18	0.51	0.05	0.75
RFQ Prevention	3.40	0.76	-0.16	-0.36
RFQ Promotion	3.50	0.63	0.16	-0.25
RFQ Difference	0.10	0.53	0.36	1.50
SOI	4.85	1.30	-0.07	-0.24
Message Importance	6.90	1.12	-0.88	1.83
Positive Attitude	3.88	0.66	-0.46	0.62
Post Message Positive Attitude	3.90	0.67	-0.38	0.35
Positive Attitude Difference	0.02	0.31	-0.03	4.41
Verbal Cues	4.11	0.64	-0.46	-0.08
Post Message Verbal Cues	4.14	0.63	-0.58	1.00
Verbal Cues Difference	0.02	0.38	0.29	5.73

Table 6*All Measure Correlations from Study 2 (N = 309)*

	1	2	3	4	5	6	7	8	9	10
1. IPIP Prevention	0.65	0.59**	0.63**	0.73**	0.11	0.14*	0.09	0.12*	0.59**	0.53**
2. IPIP Promotion		0.74	0.45**	0.58**	0.33**	0.35**	0.32**	0.35**	0.44**	0.53**
3. RFQ Prevention			0.71	0.72**	0.02	0.03	0.00	0.03	0.55**	0.43**
4. RFQ Promotion				0.64	0.09	0.13*	0.09	0.11	0.55**	0.52**
5. Positive Attitudes					0.85	0.69**	0.89**	0.69**	0.04	0.56**
6. Verbal Cues						0.86	0.67**	0.82**	0.07	0.49**
7. Post Message Positive Attitudes							0.85	0.76**	0.00	0.60**
8. Post Message Verbal Cues								0.86	0.03	0.56**
9. SOI									0.75	0.34**
10. Message Importance										0.64

Note. ** $p < .01$, * $p < .05$. Cronbach's alpha is posted along diagonal. IPIP = International Personality Item Pool; RFQ = Regulatory Focus Questionnaire; SOI = Sociosexual Orientation Inventory

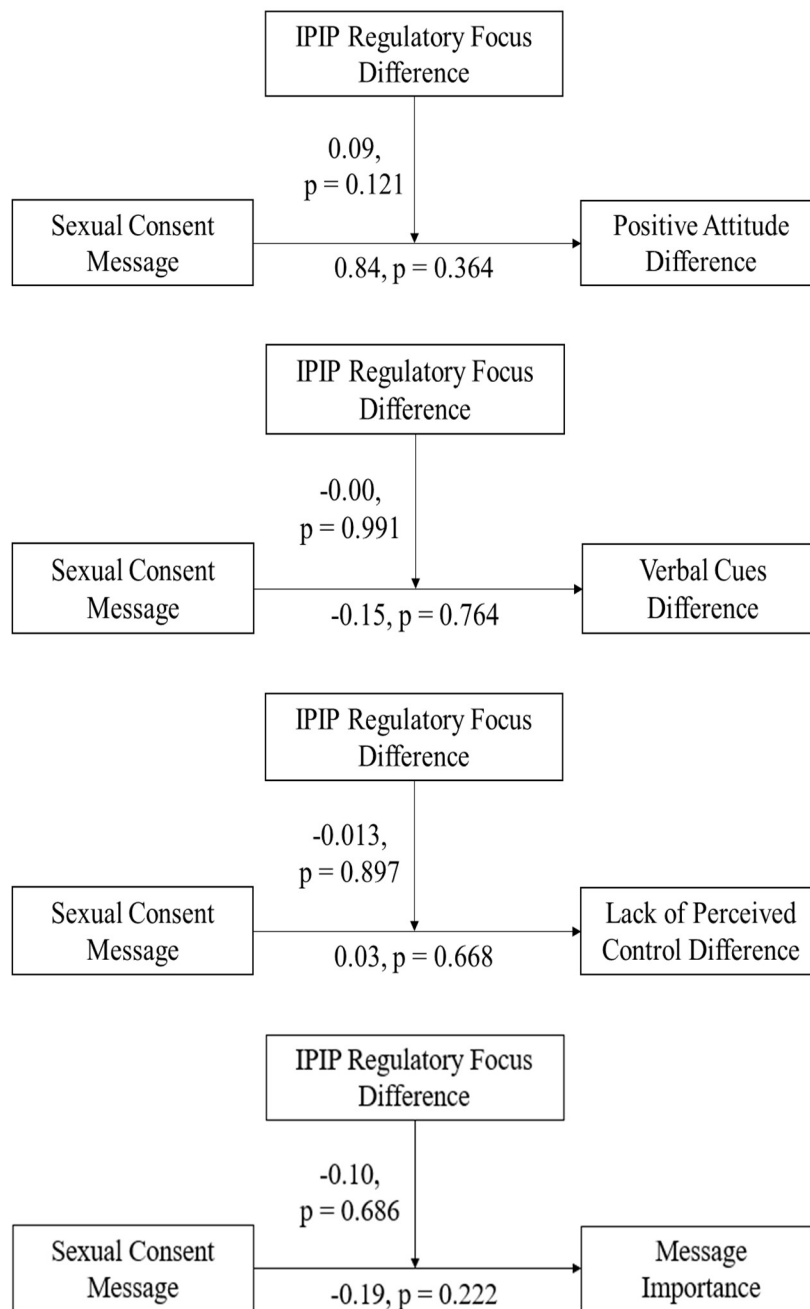
Figure 1*Study 1 Primary Analyses for the IPIP*

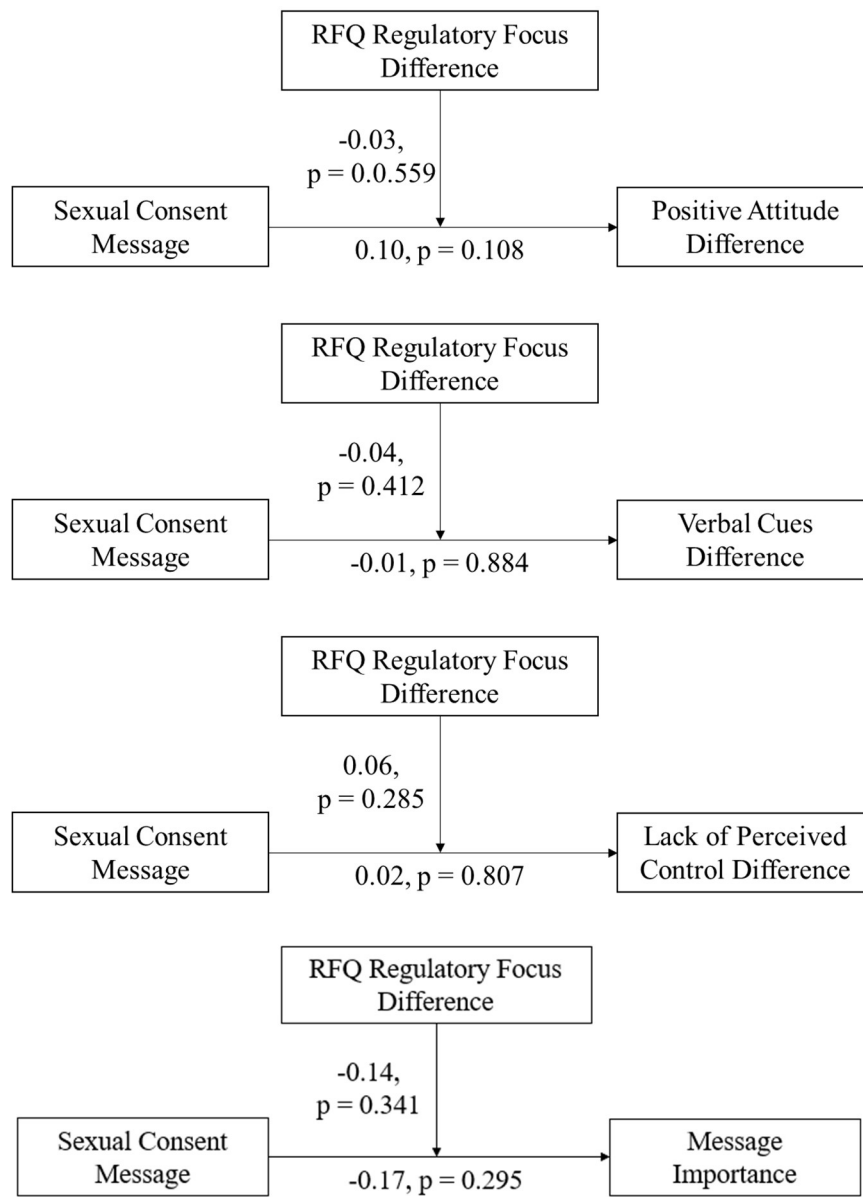
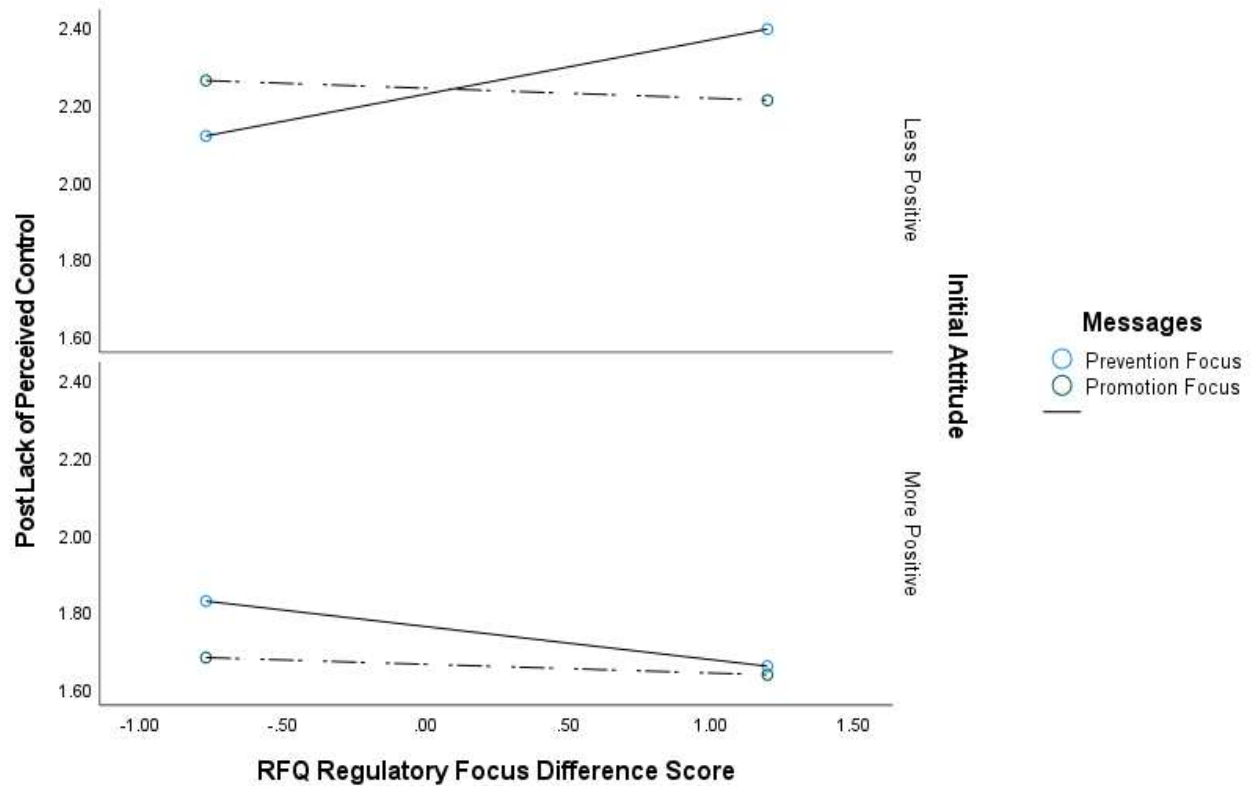
Figure 2*Study 1 Primary Analyses for the RFQ*

Figure 3

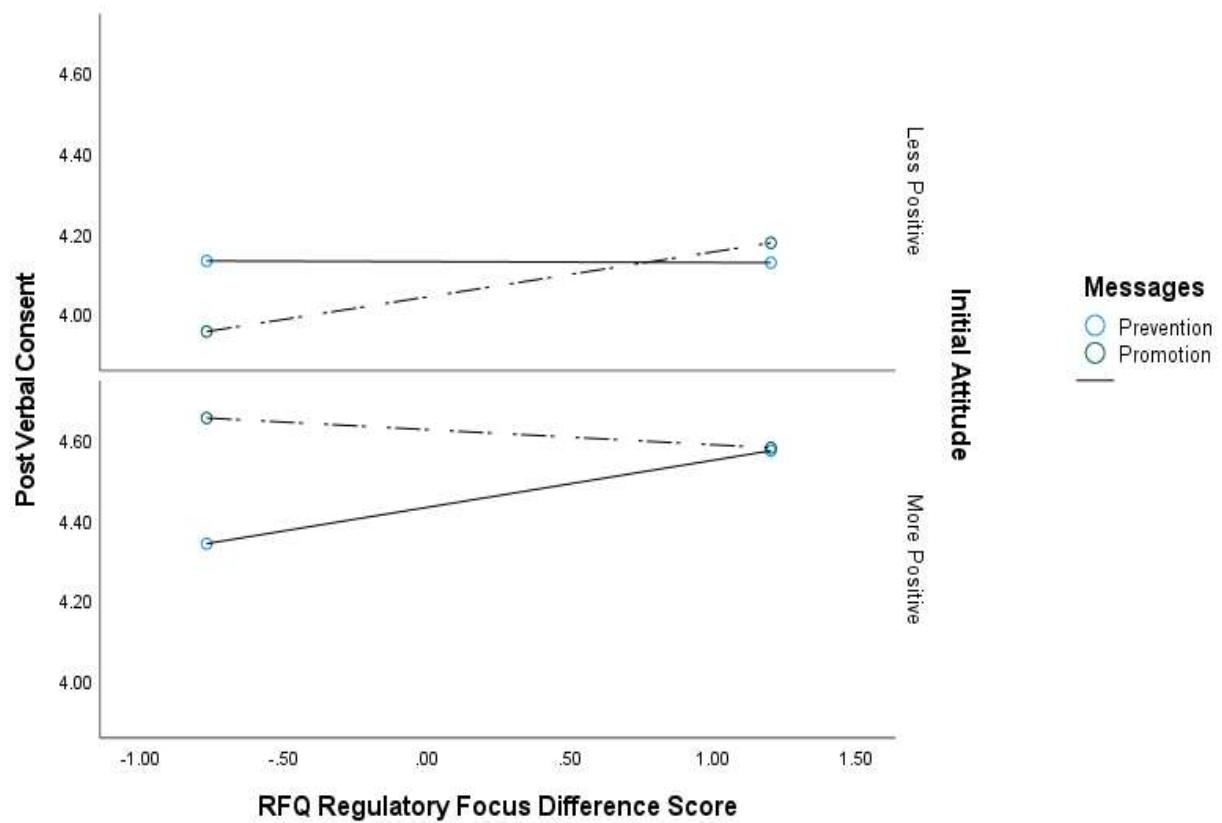
Study 1 Exploratory Analysis of Post Lack of Perceived Control with Initial Attitude as a Secondary Moderator



Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.

Figure 4

Study 1 Exploratory Analysis of Post Verbal Cues with Initial Attitude as a Secondary Moderator



Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.

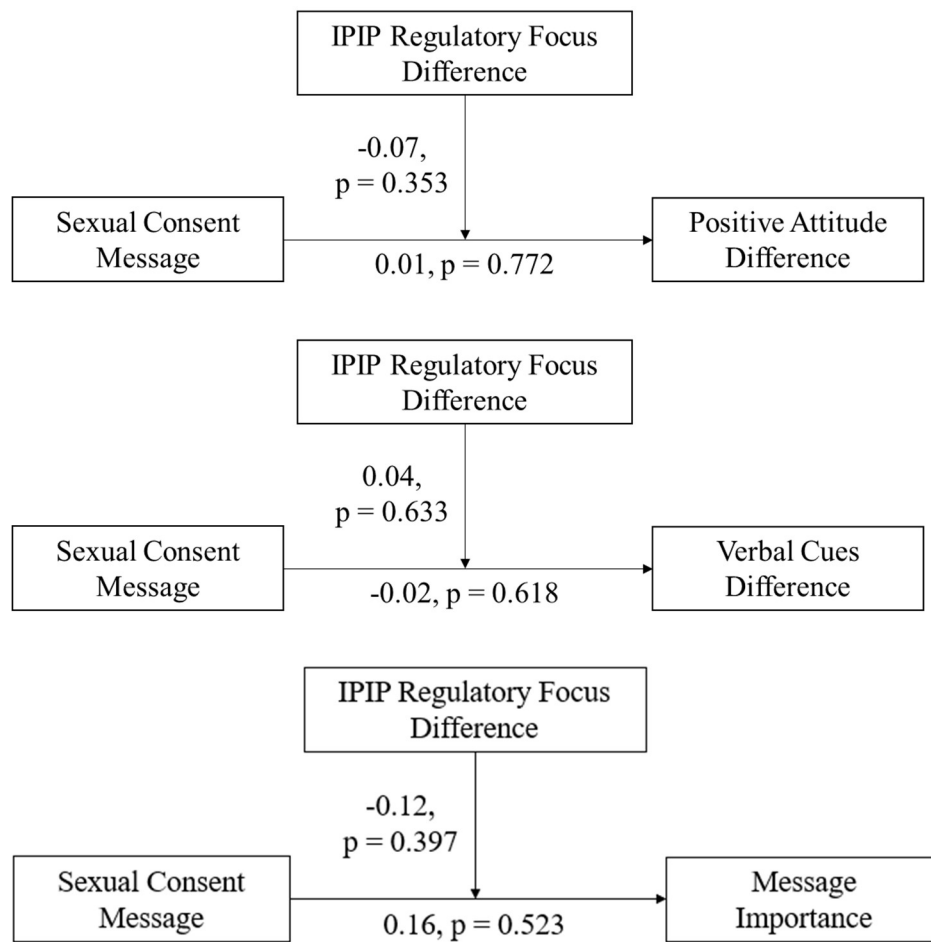
Figure 5*Study 2 Primary Analyses for the IPIP*

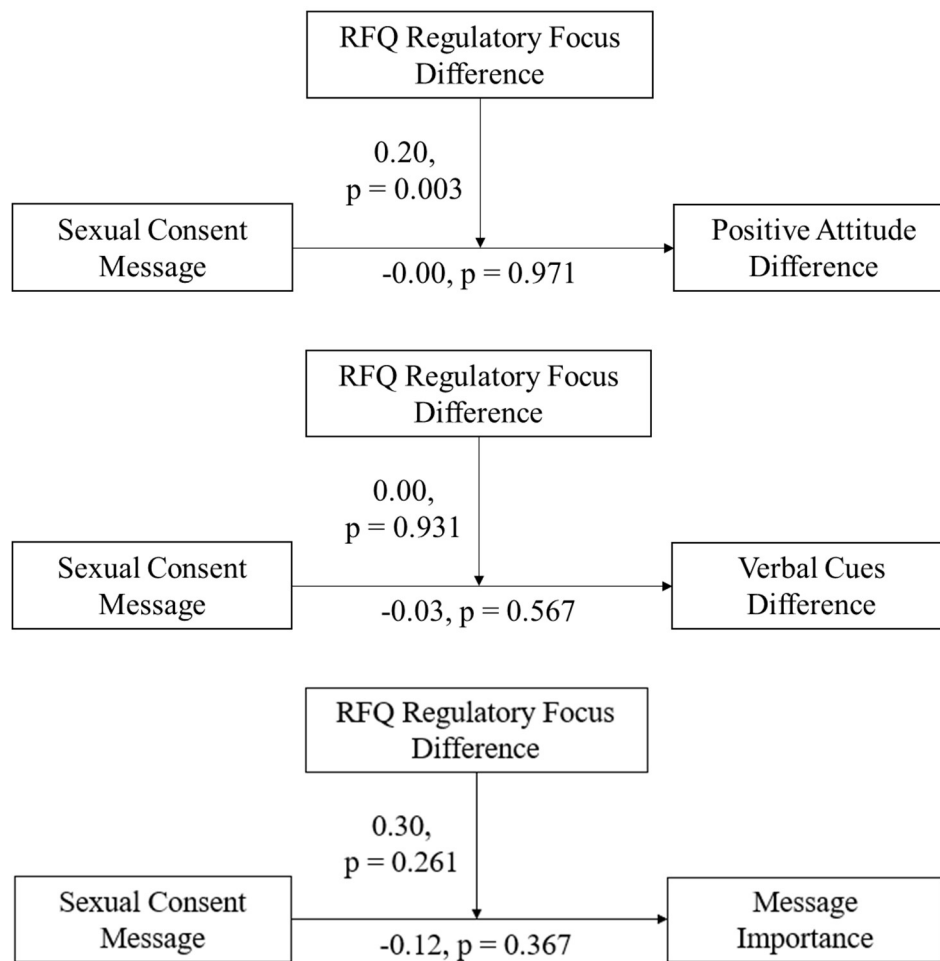
Figure 6*Study 2 Primary Analyses for the RFQ*

Figure 7

Study 2 Interaction of Message and Regulatory Focus on Attitude Change

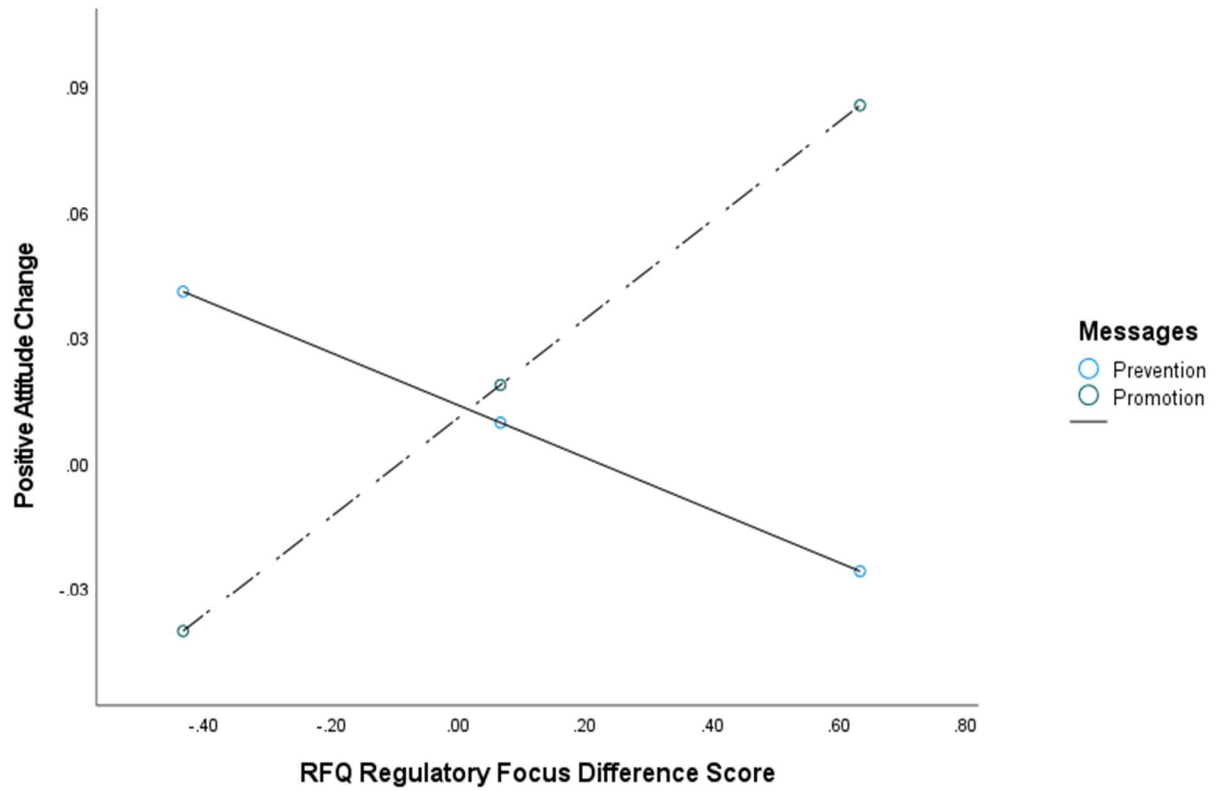
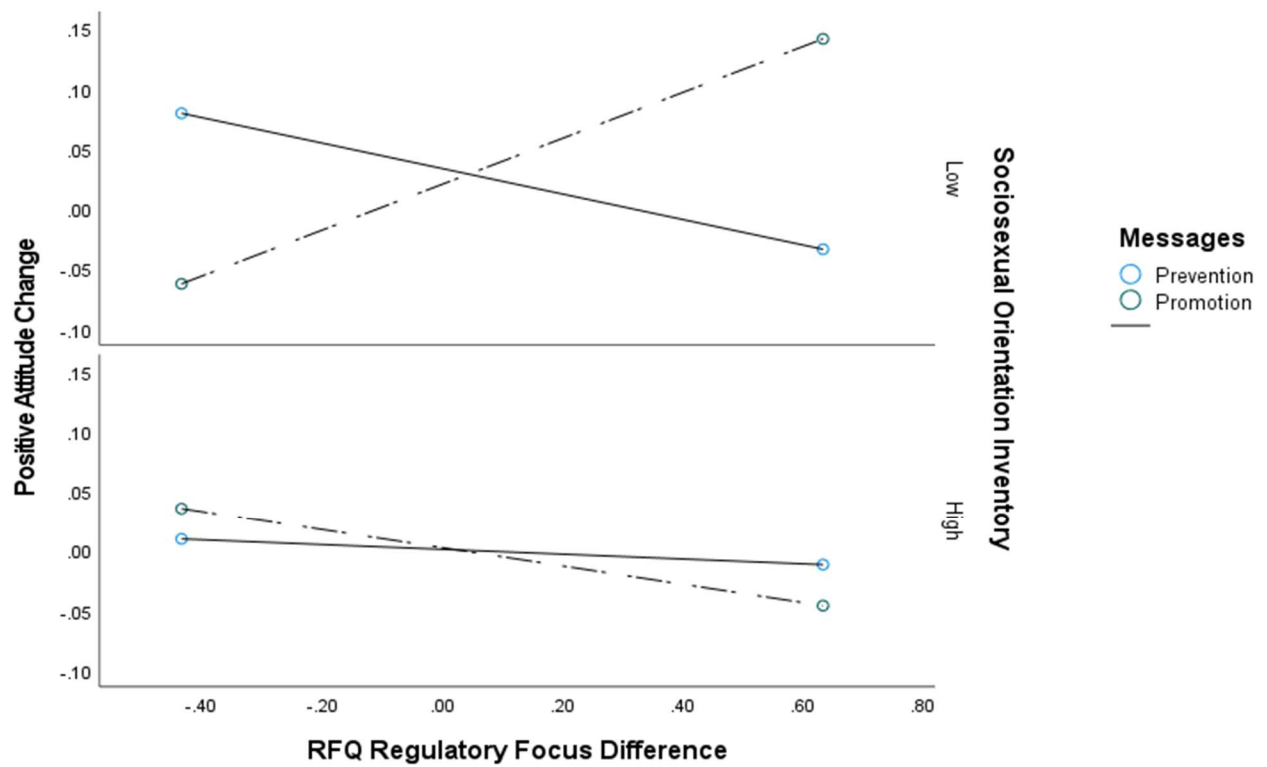


Figure 8

Study 2 Exploratory Analysis of Positive Attitude Change with SOI as a Secondary Moderator

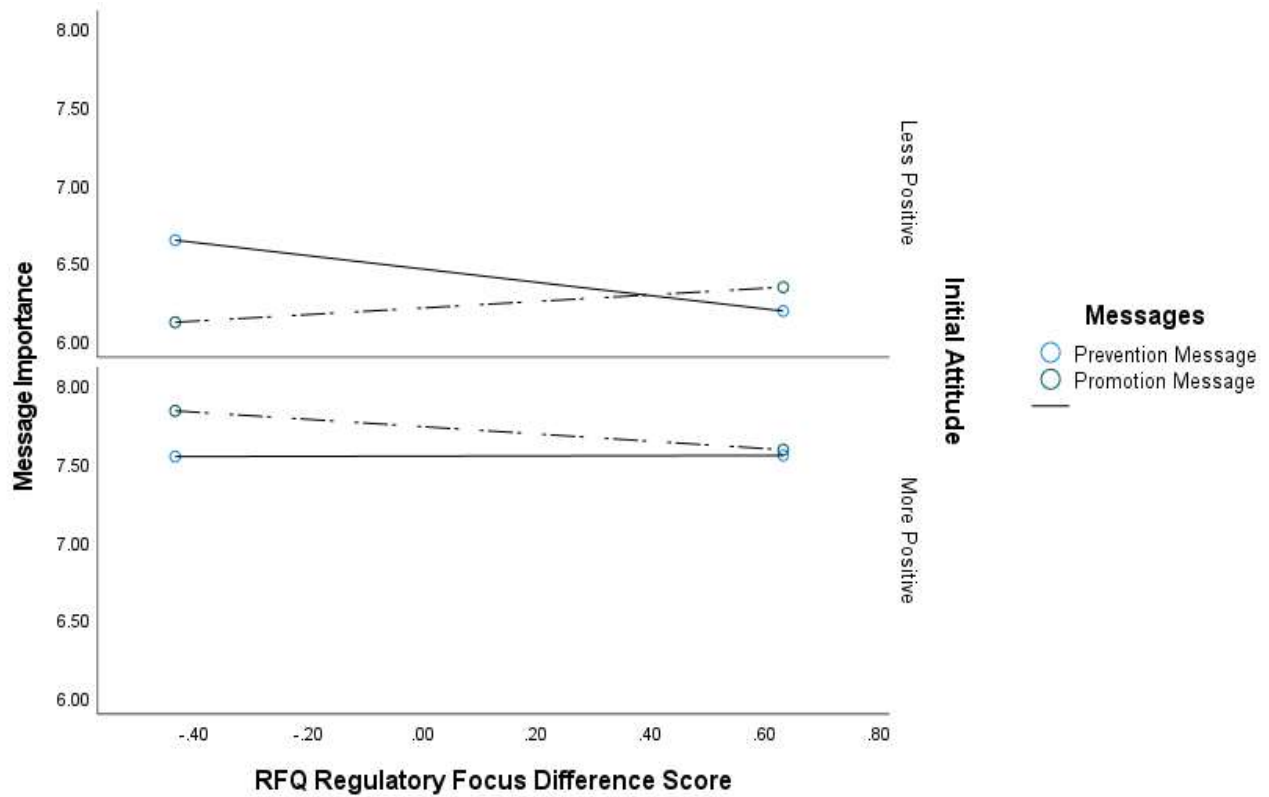


Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.

Figure 9

Study 2 Exploratory Analysis of Message Importance with Initial Attitude as a Secondary

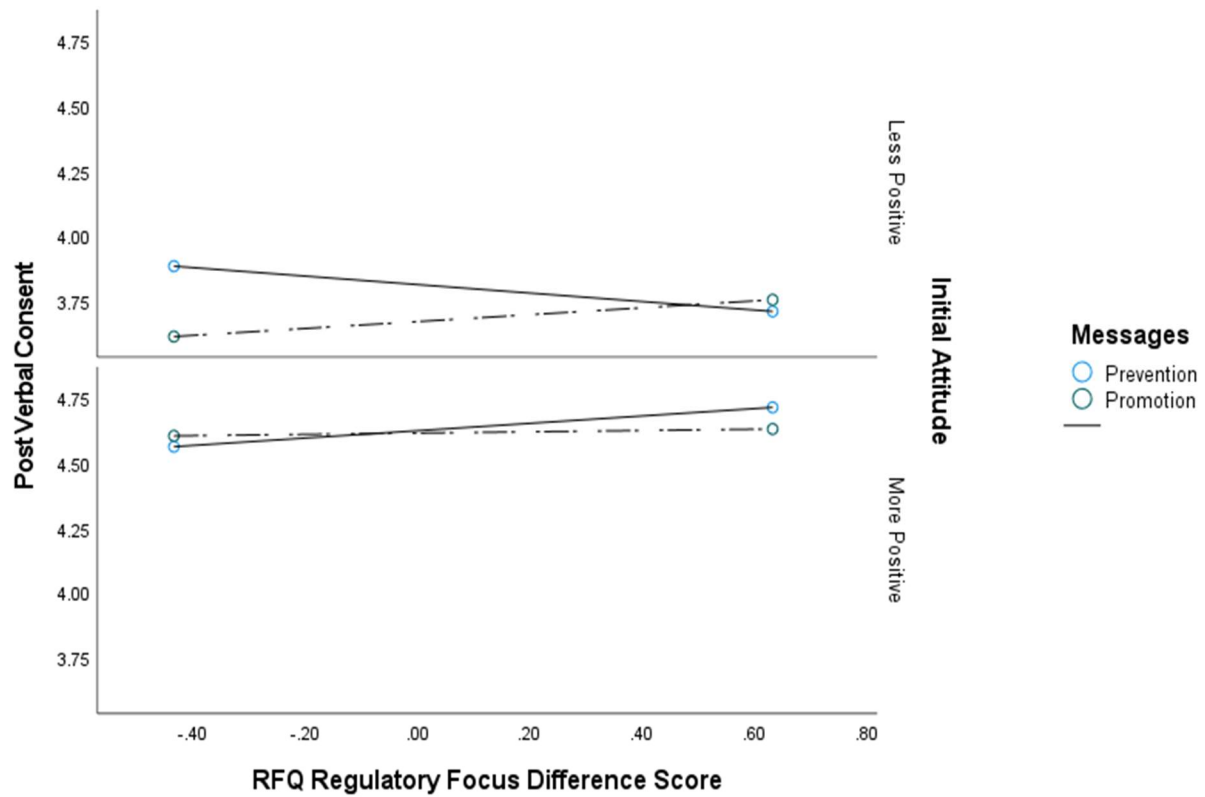
Moderator



Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.

Figure 10

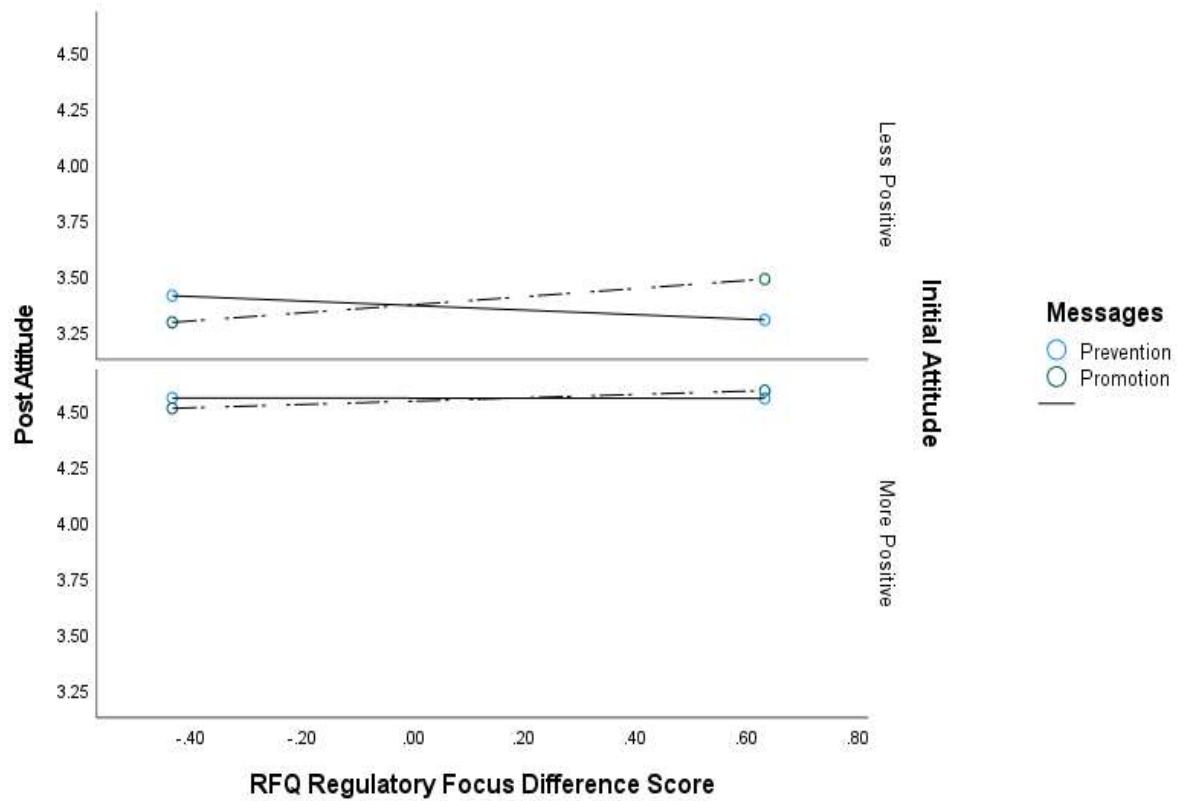
Study 2 Exploratory Analysis of Post Verbal Cues with Initial Attitude as a Secondary Moderator



Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.

Figure 11

Study 2 Exploratory Analysis of Post Positive Attitudes with Initial Attitude as a Secondary Moderator



Note. Those of a more prevention focus are represented by more negative scores on the regulatory focus scale while those with a more promotion focus are represented by more positive scores.