

# Archives of Sexual Behavior

## Daily and Prospective Associations Between Responses to Sexual Rejection and Sexual Well-Being and Relationship Satisfaction in Couples Coping with Sexual Interest/Arousal Disorder

--Manuscript Draft--

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<b>Corresponding Author:</b>	Natalie O. Rosen, Ph.D. Dalhousie University Halifax, Nova Scotia CANADA	
<b>Corresponding Author Secondary Information:</b>		
<b>Corresponding Author's Institution:</b>	Dalhousie University	
<b>Corresponding Author's Secondary Institution:</b>		
<b>First Author:</b>	Gracielle C. Schwenck, B.Sc.	
<b>First Author Secondary Information:</b>		
<b>Order of Authors:</b>	Gracielle C. Schwenck, B.Sc.	
	Sophie Bergeron, Ph.D.	
	Jackie S. Huberman, Ph.D.	
	Emily A. Impett, Ph.D.	
	Heather Oliveira, B.A.	
	Natalie O. Rosen, Ph.D.	
<b>Order of Authors Secondary Information:</b>		
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<b>Abstract:</b>	<p>Prior cross-sectional research established that four distinct responses to sexual rejection are associated with sexual and relationship well-being among couples affected by Sexual Interest/Arousal Disorder (SIAD). Examining these associations daily and prospectively will provide insight into within-person variations, temporality, and directionality. Women and gender-diverse individuals diagnosed with SIAD and their partners (N = 232 couples) completed a baseline survey, 56-day diary, and 6-month follow-up survey, assessing responses to sexual rejection, sexual satisfaction, dyadic sexual desire, sexual distress, and relationship satisfaction. Post-hoc exploratory analyses controlled for non-physical sexual coercion and sexual rejection frequency. On days when individuals with SIAD perceived, or their partners reported, greater understanding responses than usual, they both reported higher relationship satisfaction, but also greater sexual distress. Daily perceived or reported greater resentful or insecure responses were associated with lower sexual and relationship satisfaction, and greater sexual distress. Enticing responses showed mixed results. For partners, all daily self-reported response types were positively associated with their own dyadic sexual desire. Prospectively, for individuals with SIAD, perceiving greater understanding, and lower resentful and enticing responses at baseline predicted their own greater sexual and relationship satisfaction, and perceiving greater insecure</p>	

	<p>responses predicted their partners' greater sexual satisfaction, six months later. For partners, greater insecure responses at baseline predicted their own lower sexual satisfaction and greater sexual distress six months later. Results suggest that partner responses to sexual rejection may be useful intervention targets aimed at promoting the sexual well-being and relationship satisfaction of couples coping with SIAD.</p>
<p><b>Response to Reviewers:</b></p>	<p>These responses have also been attached as a file that maintained the referenced highlighting formatting.</p> <p>Response to Reviewers</p> <p>Editor</p> <p>1. Based on the comments of the referees, the ms is provisionally accepted for publication. In preparing a revised version of the ms, please address the comments of the referees, which are both detailed and thoughtful. My comments are as follows:</p> <ol style="list-style-type: none"> <li>1. P. 3: delete the title and replace with Introduction as a Level 1 header</li> <li>2. Use double-quotation marks ("like this" not 'like this')—correct throughout.</li> <li>3. P. 3: change 5th Edition of the to fifth edition of the [and remove the italics] and close up the space on both sides of the em dash (which can be a hyphen)</li> <li>4. P. 5: remove the italics on The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men and set in lowercase all of these words.</li> <li>5. Avoid "and colleagues" and replace with et al.</li> <li>6. In the text, I would avoid italicization of specific words—this is not necessary or desirable.</li> <li>7. Unmask any masked material in the revision.</li> <li>8. Use U.S. English spelling (e.g., behavior, not behaviour)—correct throughout.</li> <li>9. Item examples in quotation marks should not be italicized.</li> <li>10. In preparing a revised version of the ms, submit it as a "clean copy," i.e., not in track change mode.</li> <li>11. Before submitting the revision, please cross-check text references and the Reference section to ensure that all in-text references are in the Reference section and vice-versa. Please confirm that you have done this in your cover letter.</li> <li>12. Your revised manuscript should be submitted within 3 months of receipt of this decision Letter. If the revision requires the collection of new data, it should be submitted within 6 months of receipt of this Letter. If you require an extension beyond either of these dates to resubmit, please contact me.</li> </ol> <p>Response: Thank you for the opportunity to revise our manuscript and for the detailed feedback you have provided. The above changes have been implemented in the attached revised main document.</p> <p>Reviewer 1</p> <p>The authors have taken an innovative approach to studying FSIAD, by looking at its dyadic context and using dyadic data to study its links to couple outcomes. Below comments may help to further enhance the quality of the manuscript.</p> <p>Response: Thank you for reviewing our work and for the helpful specific feedback you have provided and which we address below.</p> <p>2. Abstract: The summary of findings is not in line with the results of the study. Specifically, the following sentence seems misleading as to the found associations: "Generally, on days when individuals with SIAD perceived, or their partners reported, higher understanding and lower resentful and insecure responses than usual, they both reported greater sexual well-being and relationship satisfaction." It would be good to try and summarize the results in a more accurate manner.</p> <p>Response: We appreciate this feedback and recognize that in striving for brevity, our original summary of the results lacked detail. We have made the following changes to the results portion of the Abstract (changes highlighted):</p> <p>"On days when individuals with SIAD perceived, or their partners reported, greater understanding responses than usual, they both reported higher relationship</p>

satisfaction, but also greater sexual distress. Daily perceived or reported greater resentful or insecure responses were associated with lower sexual and relationship satisfaction, and greater sexual distress. Enticing responses showed mixed results. For partners, all daily self-reported response types were positively associated with their own dyadic sexual desire. Prospectively, for individuals with SIAD, perceiving greater understanding, and lower resentful and enticing responses at baseline predicted their own greater sexual and relationship satisfaction, and perceiving greater insecure responses predicted their partners' greater sexual satisfaction, six months later. For partners, greater insecure responses at baseline predicted their own lower sexual satisfaction and greater sexual distress six months later."

3.Method: It would be comfortable for the reader if authors maintained the same order of presenting diary and prospective measures/data/analyses/results (e.g., always first discussing the daily ones and then the prospective ones).

Response: We appreciate this recommendation and have updated the Procedure and Measures sections to match the organization of the Data Analysis and Results sections: first presenting information about the daily diary procedures/measures and then the prospective procedures/measures.

4.Method: Can the authors include the instructions of the Responses to Sexual Rejection Scale, in order for the example items to be more comprehensible to the readers?

Response: Thank you for this suggestion. We have added the following instructions for the Responses to Sexual Rejection Scale measure in the baseline survey (p. 11; changes highlighted):

"Responses to sexual rejection were examined in the baseline survey using the original (i.e., reported RSRS for partners) and adapted (i.e., perceived RSRS for individuals with SIAD) versions of the 16-item RSRS, composed of four 4-item subscales, one for each of the four sexual rejection response types. Participants were instructed to "Please indicate how frequently you engage in the following ways when your partner declines you for sex." (original version – reported RSRS) or "Please indicate how frequently your partner responds in the following ways when you decline them for sex." (adapted version – perceived RSRS)."

We did not add the instructions to the daily diary version of the Responses to Sexual Rejection measure as they are already included in each of the items (i.e., "To what extent did you respond in this way when your partner expressed sexual disinterest today?") and there were no additional instructions. For readers seeking further details, the complete prospective and daily measures are accessible on OSF (as noted on p. 10)."

"All measures can be found on OSF: <https://doi.org/10.17605/OSF.IO/VXH58>."

5.Method: Operationalization of rejection: can the authors clarify which question was posed to assess if rejection had occurred on a specific day, as well as the degree to which both partners' reports of it are linked to each other (so if an enacted rejection always corresponded with a perceived rejection)? Also, although maybe not fitting the scope of this paper, it would be interesting to also consider sexual initiation and rejection strategies, as they both could take many forms, and affect each other. I would recommend including some thoughts on this in the discussion section.

Response: We have included the following in the Measures section to clarify how we assessed for the presence of sexual rejection in the daily diaries (p. 11):

"Participants indicated whether sexual rejection occurred each day by responding to the following face-valid items: "Did your partner say or do something to indicate they were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?" and "Did you say or do something to indicate that you were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?" Participants indicated frequency on a scale 1 – Not at all to 7 – A lot, and responses were dichotomized into 1

– Yes (i.e., equivalent to ratings of 2 to 7 on the initial, 7-point scale) and 2 – No (i.e., equivalent to rating of 1 on the initial, 7-point scale).”

Per the recommendation in Comment #10, we have included frequency of sexual rejection as a covariate in our analyses. As a result, we have added this variable to our Measures section, within which we report the degree to which couple members’ reported frequencies of sexual rejection were correlated (p. 13):

“In our daily and prospective post-hoc analyses, we controlled for both individuals with SIAD’s reported frequency of rejecting their partner and partners’ reported frequency of being rejected. Couple members’ reported frequencies of sexual rejection were moderately correlated ( $r(200) = .47, p < .01$ ).”

Further, we agree that it would be interesting to examine the interaction between sexual initiation and rejection strategies in future research, and have commented on this within the Strengths, Limitations, and Future Research section of the Discussion given that it is beyond the scope of the current paper (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019). Understanding these dynamics could provide insight into the broader sexual relationship, offering a more comprehensive picture of how couples negotiate sexual desire and interest over time. This approach could build on previous work (e.g., Kim et al., 2020; Pawłowska et al., 2024; Schwenck et al., 2023) by identifying patterns specific to couples affected by SIAD, as well as comparing these dynamics to those in couples without sexual desire challenges.”

6.Method: Was the experience of sexual coercion also assessed during follow up, as coercion could hypothetically happen for the first time between the two surveys?

Response: We appreciate this question and agree that this is a possibility. Unfortunately, we do not have data regarding non-physical sexual coercion at follow-up. We have added this limitation to our manuscript (p. 31):

“In our prospective analyses, we measured whether non-physical sexual coercion had ever occurred within the relationship at baseline. However, it is possible that, for some couples, this behavior may have first occurred between the baseline survey and the 6-month follow-up survey, and such instances were not captured in our analyses.”

7.Method: The difference between enticing responses to rejection and sexual coercion are not sufficiently discussed in the introduction, and the example items reported here do not help to make this distinction clear. Can the authors elaborate on this distinction, both on a theoretical level as based on the collected data?

Response: Thank you for identifying this opportunity for clarification. We have made the following addition to the Introduction to elucidate the distinction between enticing responses after controlling for non-physical sexual coercion, and non-physical sexual coercion (p. 7):

“Based on the mixed results of enticing responses found in previous studies (Kim et al., 2019; Schwenck et al., 2023), it may be that the enticing response items capture behaviors that can have varying outcomes based on their intent and emotional tone. Thus, by controlling for non-physical sexual coercion, we aimed to examine the associations of enticing responses that represented persistent seductive invitations for sexual activity while respecting the autonomy of individuals with SIAD, as opposed to those that relied on psychological or emotional pressure to undermine their consent.”

Within the Measures section, we report the strength of the correlation between the two variables in the non-physical sexual coercion section (p. 14) and the exact values are found in Tables 3 and 4:

“Non-physical sexual coercion was weakly (daily) and moderately (prospective) correlated with enticing responses for both couple members.”

8.Method: For assessing sexual desire, it seems that the authors only used the partner-focused subscale of the SDI-R--it would be good to make that more explicit in the Measures section.

Response: We have specified this through the following addition (p. 14; changes highlighted):

“Dyadic sexual desire was assessed with items from the partner-focused subscale of the Sexual Desire Inventory-2 (SDI-2; Spector et al., 1996), with higher scores indicating higher desire for one’s partner.”

9.Method: In reporting the assessment of sexual distress, it would be good to report an example item for the daily and baseline/follow up measure separately, just as for the other measures. Additionally, it would be good to report more clearly on the versions of the scales used, including correct parenthetical citations.

Response: Thank you for these recommendations to improve clarity. We have reported separate example items for the daily and prospective measures, and have made the following change to clarify the versions of the sexual distress scales used (pp. 15-16; changes highlighted):

“Daily. The three-item Sexual Distress Scale (SDS-3; Lin et al., 2024) was used to assess daily sexual distress (i.e., “How often did you feel... (1) distressed about your sex life? (2) worried about sex? (3) sexually inadequate?”). Total scores range from 0 to 12. . This measure has shown strong internal validity in samples across countries, gender identities, and sexual orientations (Lin et al., 2024). In the current study, items showed good consistency for individuals with SIAD (RC = .87) and partners (RC = .76). Prospective. In the baseline and 6-month surveys, sexual distress was measured using the 5-item Sexual Distress Scale-Short Form (SDS-SF; Santos-Iglesias et al., 2020). An example item is: “How often did you feel stressed about sex?”. Total scores range from 0 to 20. The SDS-SF has demonstrated strong internal validity in samples of women and men (Santos-Iglesias et al., 2020; Santos-Iglesias et al., 2018). Items displayed high internal reliability for individuals with SIAD ( $\alpha = .92$ ) and partners ( $\alpha = .88$ ).”

10.Results: It would be interesting to also report frequencies of sexual rejection, and include them as covariate on the couple level. It would also be interesting to see how the frequency of rejection is related to the type of response to rejection, as well as to the outcomes studied here.

Response: We appreciate this recommendation. We originally (i.e., in our pre-registered analyses) chose not to control for the frequency of responses to sexual rejection as our initial cross-sectional research found that there was not a high degree of variance in frequency of sexual rejection in couples coping with SIAD (Schwenck et al., 2023). In light of your suggestion, we ran post-hoc analyses including frequency of sexual rejection as a covariate. We found no changes in the significant daily associations, and two changes in the prospective associations (a new significant finding and a non-significant finding that was previously significant). We have added reference to the covariate analysis to the manuscript in the locations detailed below. We have also added the frequency of sexual rejection variable to the correlation tables included in the manuscript so that readers may review how this variable is related to the other study variables at the daily and prospective levels.

●Current Study (p. 7): “In deviation from our pre-registration, we conducted post-hoc analyses with two covariates. First, we examined non-physical sexual [...] Second, frequency of sexual rejection was included as a covariate in all of the daily and prospective analyses to determine the unique contribution of the response types in sexual and relationship well-being, independent of how often rejection occurs.”

●Measures (p. 13; Note: We chose to use the baseline reports of average frequency of sexual rejection because the average frequency of sexual rejection that occurred over the daily diaries would have been inaccurate due to missing data on days when diaries

were not completed. For instance, relying solely on data from completed diary days could misrepresent the true frequency of sexual rejection. This approach could inadvertently introduce bias, as participants may be less likely to complete diaries on days when they experience sexual rejection.):

#### “Frequency of Sexual Rejection

Frequency of sexual rejection was measured at baseline using face-valid items: “On average, how often do you decline your partner for sex? In other words, how often is your partner interested in sex, but you are not interested at that time?” and “On average, how often does your partner decline your sexual advances? In other words, how often are you interested in sex, but your partner is not interested at that time?”. Participants rated frequency on a scale of 1 – Never to 5 – Daily. Thus, each item’s total score ranges from 1 to 5.

In our daily and prospective post-hoc analyses, we controlled for both individuals with SIAD’s reported frequency of rejecting their partner and partners’ reported frequency of being rejected. Couple members’ reported frequencies of sexual rejection were moderately correlated ( $r(200) = .47, p < .01$ ).”

#### ●Results (p. 23):

##### “Controlling for Frequency of Sexual Rejection

After including the frequency of sexual rejection as a covariate, we found no changes in the daily results. Longitudinally, one new significant effect emerged: individuals with SIAD who reported greater perceived insecure responses at baseline reported lower relationship satisfaction six months later. Additionally, one previously significant result was non-significant: after controlling for both frequency of sexual rejection and non-physical sexual coercion, individuals with SIAD who perceived greater enticing responses at baseline did not report significantly lower sexual satisfaction six months later.”

●Discussion overview (pp. 23-24): “Additionally, after controlling for the frequency of sexual rejection, the daily results remained consistent, and there were two changes in the longitudinal results.”

●Discussion of insecure responses (p. 28; changes highlighted): “After controlling for frequency of sexual rejection, when individuals with SIAD perceived greater insecure responses at baseline, they reported lower relationship satisfaction, and their partners reported increased sexual satisfaction six months later.”

●Discussion of enticing responses (pp. 29-30; changes highlighted): “Over time, when individuals with SIAD perceived greater enticing responses at baseline, they reported a decrease in sexual satisfaction six months later. However, after controlling for both non-physical sexual coercion and frequency of sexual rejection, this effect was no longer significant and a second, seemingly contradictory effect emerged: when partners reported greater enticing responses, individuals with SIAD reported greater sexual satisfaction. A potential explanation is that individuals with SIAD who perceived more enticing responses at baseline may have been more distressed (e.g., guilty, frustrated) due to frequent rejection interactions, and thus, may be primed to interpret neutral interactions as a partner’s attempts to initiate sexual activity and, as a result, persistent partner unresponsiveness (Brassard et al., 2012; Carrère et al., 2000; Hogue et al., 2019). However, when partners reported greater enticing responses, these intentional, non-coercive interactions may have made the individuals with SIAD feel sexually desirable and, consequently, enhanced their sexual satisfaction, independent of sexual rejection frequency (Frederick et al., 2017; Metz & McCarthy, 2007).”

11.Results: It seems that all studied responses to rejection were associated with higher sexual desire of partners. Can the authors elaborate on this result and its implications?

Response: Thank you for identifying a pattern that would benefit from elaboration. We have included the following discussion of this pattern within a new paragraph in the Discussion offering a broader interpretation of the results (p. 24):

“For partners only, daily, all response types were positively associated with their own partner-focused sexual desire. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher partner-focused sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013).”

12.Results: The tables where the analysis results are reported should be added to the main article for ease of reference, instead of adding them as supplemental material.

Response: Thank you for this recommendation. We have added these tables to the article and referenced them in the Results section (p. 20):

“The results of the daily and prospective analyses can be found in Tables 5 and 6, respectively.”

13.Discussion: Comparably to the point made regarding the abstract, the summary of results in the first paragraph of the discussion (“Results generally aligned with our hypotheses: when women and gender diverse individuals with SIAD perceived, and their men, women, and gender diverse partners reported, greater understanding and lower resentful and insecure responses, both partners reported greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress.”) is not in line with the findings of the study and is thus misleading.

Response: We appreciate that this summary would benefit from clarification. We have replaced the quoted section above with the following (p. 23):

“With some notable exceptions which are discussed throughout this section, our significant results generally aligned with our hypotheses: perceived and reported greater understanding responses, lower resentful responses, and lower insecure responses, were linked to greater sexual and relationship well-being outcomes.”

14.Discussion: The authors have structured the discussion section based on the four types of responses studied. Although it is interesting to read the possible explanations for each finding that is inconsistent with the study hypotheses, discussing the findings in this structure seems fragmented and too detailed, preventing the reader from forming an integrated view of the results and new insights based on the confluence of findings. Moreover, it prevents the authors from making interesting links and reaching overarching conclusions, for instance regarding the fact that sexual desire was associated with each and every response to rejection. A helicopter view on the results and a discussion of their implications on a higher level would be a recommended addition to this section.

Response: We appreciate this recommendation and agree that a helicopter view of the results at the beginning of the Discussion offers the reader an opportunity to integrate the more nuanced interpretations of the individual responses within a broader conceptualization of the results. We have added the following paragraph to the Discussion (p. 24):

“From a broader perspective, several interesting patterns emerged in the data. At the daily level, all response types were positively associated with sexual distress for both couple members. Perceiving or reporting a higher frequency of any response type may indicate that sexual rejection—a significant source of sexual distress, as described qualitatively by both enactors and receivers in couples coping with low desire (Frost & Donovan, 2019)—occurred that day. For partners only, daily, all response types were positively associated with sexual desire for their partner. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher partner-focused sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013). Among the daily analyses, resentful and insecure responses showed the greatest number of significant associations. In line with our prior cross-sectional research (Schwenck et al., 2023), these results suggest that understanding and enticing responses may operate through more context-dependent mechanisms and involve additional moderating variables in their associations with couples’ daily well-being. Comparing the two types of analyses, the daily data yielded five times more significant associations than the prospective data. Further, daily findings that aligned with our hypotheses generally exhibited medium to large effect sizes with narrower credible intervals, whereas the expected prospective results showed small to medium effect sizes with larger confidence intervals. These patterns suggest that responses to sexual rejection may have stronger implications for couples’ same-day outcomes relative to their long-term outcomes.”

Reviewer 2

This manuscript presents the findings of a study on daily and prospective associations between responses to sexual rejection and sexual and relationship satisfaction, sexual desire, and sexual distress of women and gender diverse individuals with SIAD and their men, women, and gender diverse partners.

The study is interesting and well-conducted. I mostly have some questions and comments which, when addressed, will only further strengthen the paper, or so I hope.

Response: We appreciate your positive response and insightful comments on our paper. We believe your feedback has strengthened the manuscript.

15. Conceptually, although I appreciate the reference to various models (including those introduced by Rosen & Bergeron, 2019, Prekatsounaki et al., 2022, and van Anders et al., 2022) that focus on dyadic processes, I was struggling a bit on how exactly the selected model (IERM, Rosen & Bergeron, 2019) relates to the variables focused on in the current study. That is, the study doesn't seem to provide a test of the model per se. Instead, the model seems to guide some of the ideas explored in this paper. Why did the authors decide to focus on the questions they did, while they, instead, could have decided to test some of the IERM's implications more directly? For example, the authors write: "As outlined in the IERM (Rosen & Bergeron, 2019), more understanding—and less resentful and insecure—responses may promote a secure relational environment and support effective emotion regulation, thus, fostering couples' greater sexual well-being and relationship satisfaction." It would have been interesting to look at this. Especially if lags would have been explored (e.g., understanding responses today may increase the likelihood of no rejection the following day or the next time the partner expresses interest in a sexual interaction). I am just wondering. Of course, I understand that choices need to be made, about the focus of a particular study or manuscript, but I found the connection between theory and study variables (apart from the fact that the findings do not seem to support these ideas that strongly) not very clear.

Response: Thank you for identifying that the link between the IERM and our study would benefit from clarification within our manuscript. While we did not test the IERM directly, the theory highlights proximal interpersonal factors as key predictors through which couples navigate sexual challenges. As a result, the IERM provided the rationale for focusing on sexual rejection responses as a meaningful way to examine proximal factors associated with couples' coping with SIAD. This rationale is referenced in the Introduction (p. 5):

"Indeed, as posited in the IERM (Rosen & Bergeron, 2019), it is possible that responses to sexual rejection are best conceptualized as a proximal factor given that they are theoretically expected to vary day-to-day alongside other fluctuating variables (e.g., mood, affection; Byers & Heinlein, 1989; Luginbuehl et al., 2024)."

Additionally, as one of the initial studies examining responses to sexual rejection—and the first to examine daily and longitudinal associations—our primary goal was to develop a foundational understanding of these associations before hypothesizing and assessing potential mechanisms. Indeed, based on our findings, it seems as though some of the response types may be more nuanced than we originally hypothesized. For example, we found that on days with greater reported and perceived understanding responses than usual, individuals with SIAD and partners both reported greater relationship satisfaction, but also greater sexual distress. Thus, greater understanding responses may not only facilitate more adaptive emotion regulation strategies (e.g., approach, acceptance), but may also promote less adaptive strategies (e.g., avoidance), with implications for subsequent sexual outcomes. Thus, while we agree that this would be an intriguing avenue for future research, testing the mechanisms proposed by the IERM was outside the scope of this project. We have made the following addition to the Current Study section to outline this choice (p. 6).

"Further, although our hypotheses were informed by the IERM (Rosen & Bergeron, 2019), the goal of this study was to develop a better understanding of the direct effects



between responses to sexual rejection and sexual and relationship well-being outcomes, as a foundation for further research.”

We have also highlighted this as a potential avenue for further study in our Strengths, Limitations, and Future Research section of the Discussion (pp. 31-32).

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019).”

16. Did the authors consider using an ESM instead of a daily diary approach? The former would have allowed for a more independent assessment of all variables, no?

Response: Thank you for raising this point. It is true that ESM could offer a more fine-grained assessment of variables compared to daily diaries, as participants would not be required to reflect on their entire day. However, we chose to go with a daily diary approach for a couple of reasons. First and foremost, sexual rejection is unlikely to occur multiple times a day. Second, sexual rejection and its associated responses are described as a salient experience (e.g., Frost & Donovan, 2019), such that participants are likely to remember it fairly accurately when asked about it at the end of the day (Yonelinas & Ritchey, 2015). Thus, we chose the daily diary approach as it strikes a practical balance between capturing daily variability and minimizing participant burden. While ESM provides real-time assessments, it can be logistically demanding and potentially intrusive for participants, which may impact adherence and data quality (Horstmann, 2021). We believe that the daily diary approach allows for robust insights into day-to-day dynamics that may not be comprehensively captured by ESM, while maintaining participant convenience and engagement.

17. I found the inclusion of the sexual coercion variable confusing. On what theoretical grounds was it included? Should coercion be considered another possible response to rejection (so, a fifth?)? The percentages of individuals reporting having experienced or applied coercion seems high to me. Were there couples who reported high frequencies/incidences of this? And if so, should they be included in the study?

Response: Thank you for these questions. As mentioned in response to Comment #7, we have added the rationale for the inclusion of non-physical sexual coercion to the Introduction (p. 7). Future research may choose to examine the intent and emotional tone associated with enticing response behaviors in order to determine if this response type may be better conceptualized as two or more separate factors. We have added this potential direction to our Strengths, Limitations, and Future Research section of the Discussion (p. 31):

“To further elucidate the role of enticing responses, future research may benefit from examining the intent and emotional tone of enticing behaviors.”

Regarding the prevalence of non-physical sexual coercion within the sample, research suggests that as many as 50% of heterosexual couples report sexual coercion directed at a female couple member (Brousseau et al., 2011; O’Leary & Williams, 2006). Thus, the rates seen in our study (ranging from 23.0% to 38.2%) are—unfortunately—within the expected range. The mean frequencies of non-physical sexual coercion reported by both couple members at baseline were:  $1.28 \pm 2.1$  (individuals with SIAD) and  $1.04 \pm 2.0$  (partners), which represented an approximate rating of “1 – Not in the past year, but it did happen before”. At the daily level, the means were:  $1.21 \pm 0.45$  (individuals with SIAD) and  $1.12 \pm 0.37$  (partners), which represented an approximate rating of “1 – Not at all”. We maintained all couples in the analysis, independent of reported frequency of non-physical sexual coercion, to maintain representation of the experiences of couples coping with SIAD.

18. Which brings me to another question. Could intercorrelations be provided for the key study variables? For example, in this case, how was use/experience of coercion associated with variables such as sexual distress and relationship satisfaction in the

daily diary component?

Response: In the previous iteration of this manuscript, there was a statement in the Results section that correlation tables for all study variables were provided in the supplementary materials on OSF. However, the Reviewer comments have highlighted the value of quick access to the variables' correlations. Thus, we have moved the correlation tables from the supplemental materials on OSF into the manuscript (see Tables 3 and 4).

19. Also, and more in general, what were the intercorrelations among the four possible responses? I assume people could have expressed/experienced combinations of responses. I understand that, here, too, decisions had to be made, but I would have been very interested in seeing analyses that combined the predictor variables (the four responses). Perhaps days when partners express understanding are, at the same time, days when other, more negative responses are expressed as well? (Which could also explain the positive association with sexual distress?). It would be good to at least learn a bit more, as reader, about how distinct or not responses to rejection were.

Response: We agree that future research in the responses to sexual rejection literature would benefit from examining associations of the interactions between the response types – similar to those conducted by Kim et al. (2020) with sexual rejection behaviors. As this was outside of the scope of the current study, we have referenced it as a potential direction for further exploration in our Strengths, Limitations, and Future Research section of the Discussion (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection.”

Additionally, as mentioned in our response to Comment #19, we have moved the correlation tables from the supplemental materials on OSF into the manuscript to facilitate readers' understanding of variables' intercorrelations (see Tables 3 and 4).

20. Some other observations and questions:

The authors write: "Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) and conducted in Mplus (Version 8). The women and gender diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples." I am not that familiar with the use of residual dynamic structural equation in dyads but wonder how it deals with (in)distinguishability between actors/partners? In APIM, prior to making any statements on gender effects, Kenny et al., 2006 recommend actual tests of distinguishability, as not all APIM analyses with (even mixed gender) couples statistically meet the criterion for distinguishability. I assume this is incorporated in these tests?

Response: Thank you for highlighting that how we handled distinguishability in our analyses could have been more clearly defined. In this study, the distinguishing factor between partners was not gender, but rather the diagnosis of SIAD. Kenny et al. (2006, p. 129) define indistinguishable dyads as having equal means and variances for each variable and having the same intra- and interpersonal correlations. However, results from our previous study in this population found significant differences in couple members' mean understanding responses and sexual desire (Schwenck et al., 2023), thus indicating that these couple members are distinguishable. While we recognize the importance of testing for distinguishability when analyzing dyads with potentially confounding variables such as gender, in our case, the primary variable differentiating the dyad members was the clinical diagnosis. As a result, we can confirm that our analyses were aligned with Kenny et al.'s (2006) definition of distinguishability. Additionally, other experts argue that conceptual reasons for assuming distinguishability are paramount (e.g., Gonzalez & Griffin, 1999). We have amended our statement regarding distinguishability in the manuscript to state (p. 16; changes highlighted):

“Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny,

2005) and conducted in Mplus (Version 8). The women and gender diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples, due to the clinical diagnosis.”

21. Although the authors indicate that couples were ineligible to participate if they "were undergoing treatment for sexual challenges or fertility treatment, actively trying to conceive, pregnant, breastfeeding, within one-year postpartum, or if one or both members self-reported a severe and untreated mental or physical illness." Was it checked if some of these things changed over the course of the study?

Response: Thank you for identifying an area for clarification. We have added the following statement to the Procedure section to elucidate what factors were confirmed throughout the study (p. 10):

“Participants’ continued eligibility was confirmed at the beginning of the 6-month survey, with the exception of severe and untreated illness, which was only assessed during the initial screening.”

22. The study was inclusive in terms of gender and sexual orientation. Have the authors considered the possibility that, given the relatively sizable number of non-heterosexual-identified partners, this, while making the sample richer and more interesting, may also make interpretations more challenging? I understand and support the general goal of extending beyond traditional samples of self-identified binary and/or heterosexual individuals, but most theories and I would guess the majority of studies on sexuality and intimate relationships are based on them. Do we have sufficient theoretical or empirical grounds to assume that relationship and sexual dynamics can be assumed to work in identical ways for individuals, and couples, representing such diversity in gender and sexual orientation? I wonder if the authors would be willing to add some thoughts on this to the discussion.

Response: Thank you for this insightful observation. We agree that the inclusion of a diverse sample in terms of gender and sexual orientation adds both richness and complexity to the interpretation of our findings. We are continuously reflecting on these considerations as we work to ensure our research remains accessible and inclusive, while maintaining clarity in its interpretability. Regarding your specific point, we hypothesize that an individual’s identification with gendered cultural norms and values may be a more significant factor in shaping relationship and sexual dynamics than gender or sexual orientation alone. We have made the following addition to the Discussion (pp. 30-31; changes highlighted) to reflect these considerations:

“While our study sample included data from couples with non-majoritized identities, most individuals with SIAD were women (96.6%), most partners were men (87.1%), and most participants were heterosexual (74.1%), Euroamerican (81.6%), and had a high combined annual income (i.e., >\$80,000; 56.9%), thus limiting the generalizability of our results. Further, as existing theories and prior research in sexuality and intimate relationships are often grounded in traditional binary gender models, the generalizability of these theories to diverse populations requires ongoing reflection and caution. Indeed, there may be sociocultural dynamics surrounding sexual rejection and responses to sexual rejection that this study does not have sufficient data to address. Specifically, future research could benefit from exploring how individuals’ alignment with societal expectations around relationship and sexual norms—across gender identities and sexual orientations—affects their response to sexual rejection and its outcomes.”

23. It is a pity that I, as a reviewer of this manuscript, am not provided with the link of the pre-registration. Masked reviews, sure, but I am not able this way to check if everything announced in the pre-registration was done and followed through. (Perhaps more for the Editor than for the authors to consider). [Editor’s note: What would the purpose be of noting pre-registration if a reviewer cannot access it? Or maybe the reviewer did not know how to access it?]

Response: We understand that this is not an ideal scenario. Unfortunately, through OSF, the pre-registration was masked when the view-only link was created for the project. In the future, we will attach the pre-registration document as a supplemental

file for the reviewers. The file is now accessible at:  
<https://doi.org/10.17605/OSF.IO/9CTHK>.

24. Finally, also perhaps more something for the discussion, I missed a discussion on the relevance of responses to rejection by the SIAD participants, not their partners. The current study seems to suggest that all sexual activity in couples where one person is diagnosed with SIAD is initiated by the partner, and that only the partner has to deal with rejection. Yet, I would assume that individuals with SIAD also do initiate sex, or show interest in sexual interactions, at least sometimes. And their partners, at least sometimes, may also show rejection responses. This has been studied in nonclinical samples (see work by de Graaf & Sandfort, 2004, Baumeister & Dhavale, 2001, and also a recent ESM study by Pawlowska et al., 2024). It is not entirely clear to me if the authors collected data on initiation of sexual activity by the individuals with SIAD, but if so, it would be interesting to hear more about the proportion of days that the individual with SIAD versus the partner expressed interest, or even about how often it coincided. More in general, it isn't entirely clear (also not from the supplemental materials, including the questionnaires), how this was approached. I don't seem to see questions about initiation, but only on rejection. Either way, my main point here is that I wonder if the authors could share their ideas about the potential relevance of including partner responses not to rejection but to the expression of interest, what might predict this (both the responses and SIAD individuals expressing interest), how it may unfold, dynamically, and possibly affect longer-term outcomes. Related to this, previous studies, including Schwenck and colleagues (2023) and Pawlowska and colleagues (2024) included or focused on non-SIAD samples, revealing interesting patterns, and raising questions about what mechanisms or dynamics might be specific to couples with SIAD and couples that do not deal with problems related to sexual desire. Again, perhaps the authors could address some of these questions and present recommendations, where they think relevant, for future research.

Response: We appreciate and share your interest in the entirety of the dynamics/interactions that couples (including those coping with SIAD) undergo with sexual initiation, acceptance, and/or rejection. Given how complex these interactions can be, though, as highlighted throughout your comment, it was outside the scope of this project to examine and address every aspect of these interactions.

First, we agree that individuals with SIAD may also initiate sex or show interest in sexual activity, albeit much less frequently (Frost & Donovan, 2019), and we did not intend to suggest that only partners of individuals with SIAD initiate sexual activity. We have added the following to our rationale for focusing on partners' responses to sexual rejection to highlight this (p. 6; changes highlighted):

“Though each couple member may initiate and reject sexual activity, the interpersonal dynamics of sexual rejection that cause significant distress for couples with SIAD reflect circumstances in which the individuals with SIAD are the ones frequently declining sex, and hence their partners frequently experience the rejection (e.g., Frost & Donovan, 2019).”

Second, we agree that how couple members initiate sexual activity may play a role in potential sexual rejection and responses to sexual rejection. However, the focus of this research was specifically on sexual rejection responses and as a result we do not have data regarding the initiation activity of couple members. Similarly, while it could be elucidating to conduct our analyses in a sample of couples not affected by SIAD and then compare the results, we did not collect those data for the current project. Our focus was on this clinical sample and informing potential treatment targets. We have included the following discussion of directions for future research in our Discussion (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019). Understanding these dynamics could provide insight into the broader sexual relationship, offering a more comprehensive picture of how

couples negotiate sexual desire and interest over time. This approach could build on previous work (e.g., Kim et al., 2020; Pawłowska et al., 2024; Schwenck et al., 2023), by identifying patterns specific to couples affected by SIAD, as well as comparing these dynamics to those in couples without sexual desire challenges.”

Reviewer 3

25. This manuscript aims to examine the daily and prospective associations between perceived and partner-reported responses to sexual rejection and sexual well-being/relationship satisfaction among both couple members for those couples in which one female partner meets the criteria for Female Sexual Interest/Arousal Disorder (SIAD). There is much to like about this manuscript. It is incredibly well written and does a nice job of summarizing the existing literature in this domain. The authors have recruited a seemingly well-powered study with an impressive design that assesses their variables of interest dyadically and longitudinally. They also utilize relatively new, complex models to estimate their within-person daily associations. Despite these clear strengths, I had some concerns that dampened my enthusiasm for this manuscript. I expand on these concerns below.

Response: We appreciate your enthusiasm for our manuscript and the thoughtful comments you have provided regarding how to address your concerns.

26. Perhaps most notably, I think the authors could offer a bit more transparency in the summary/take-away of their findings. They state on pages 22 and 23 of their Discussion section that "results generally aligned with our hypotheses: when women and gender diverse individuals with SIAD perceived, and their men, women, and gender diverse partners reported, greater understanding and lower resentful and insecure responses, both partners reported greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress." Although this is technically true, the authors conducted numerous analyses to test this claim—e.g., for understanding, resentful, and insecure responses (that is, excluding enticing responses), the authors conducted 32 different analyses across their four dependent variables and daily/prospective analyses—and not every path was significant. In fact, in looking at Tables 3 and 4, it appears that less than half of their tested paths emerged as significant. I think it would be helpful for the authors to be clearer about which paths emerged as significant, which paths did not, and speculate about why inconsistencies may have emerged. They do acknowledge the null versus significant paths in their subsections highlighting each type of sexual rejection, but I think it would be helpful if they were more transparent about the fact that their findings were not as straightforward as their summary statements might suggest. As well as speculate...

## **Daily and Prospective Associations Between Responses to Sexual Rejection and Sexual Well-Being and Relationship Satisfaction in Couples Coping with Sexual Interest/Arousal Disorder**

Gracielle C. Schwenck, B.Sc.<sup>1</sup>, Sophie Bergeron, Ph.D.<sup>2</sup>, Jackie S. Huberman, Ph.D.<sup>1</sup>,  
Emily A. Impett, Ph.D.<sup>3</sup>, Heather Oliveira, B.A.<sup>1</sup>, & Natalie O. Rosen, Ph.D.<sup>1,4</sup>

### **Institutions**

1. Department of Psychology and Neuroscience, Dalhousie University, 1355 Oxford Street, Halifax, NS, B3H 4R2, Canada
2. Département de Psychologie, Université de Montréal, Succursale Centre-Ville, CP 6128, Montréal, QB, H3C 3J7, Canada
3. Department of Psychology, University of Toronto Mississauga, 3359 Mississauga Road N., Mississauga, ON, L5L 1C6, Canada
4. Department of Obstetrics and Gynaecology, IWK Health Centre, 5850/5980 University Avenue, Halifax, NS, B3K 6R8, Canada

**Corresponding author:** Natalie O. Rosen, *Email:* nrosen@dal.ca, *Phone:* (902) 494-4044, *Fax:* (902) 494-6585, *Mailing Address:* 1355 Oxford Street, Departments of Psychology and Neuroscience, Life Sciences Centre, P.O. Box 15,000, Halifax, NS, B3H 4R2, Canada

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### **Declarations**

**Conflicts of interest/Competing interests:** The authors declare they have no conflicts of interest or competing interests.

**Ethics approval:** Approval was obtained from the ethics review boards at Dalhousie University and Université de Montréal.

**Consent to participate:** Informed consent was obtained from all individuals with whom clinical interviews were completed and all study participants.

**Availability of data and material:** Syntax and outputs for all analyses, along with supplemental material, are available on OSF: <http://tinyurl.com/47baws66>.

**Code availability:** Not applicable.

**Authors' contributions:** Conceptualization: GCS & NOR; Data curation: GCS & HO; Formal analysis: GCS & HO; Writing - original draft preparation: GCS & NOR; Writing - review and editing: GCS, NOR, JSH, SB, & EAI; Visualization: GCS, JSH, & NOR; Funding acquisition: NOR, SB, & EAI.

Dr. Kenneth J. Zucker  
Editor  
*Archives of Sexual Behavior*

December 1, 2024

Dear Dr. Zucker,

We appreciate the Reviewers' thoughtful feedback and believe that addressing these comments has strengthened the manuscript considerably. We have responded to each comment within our response letter (attached) and the attached manuscript is a "clean copy" with all previously masked material now unmasked. We can confirm that we have cross-checked the text references with those in the References section.

Thank you for your continued consideration of this manuscript.

Sincerely,

Gracielle C. Schwenck, B.Sc. (*first author*)  
Clinical Psychology Ph.D. Candidate  
Dalhousie University

Natalie O. Rosen, Ph.D., R. Psych. (*corresponding author*)  
Professor  
Dalhousie University  
1355 Oxford Street, PO. Box 15000  
Halifax, Nova Scotia, Canada, B3H 4R2  
natalie.rosen@dal.ca



## Response to Reviewers

### *Editor*

1. *Based on the comments of the referees, the ms is provisionally accepted for publication. In preparing a revised version of the ms, please address the comments of the referees, which are both detailed and thoughtful. My comments are as follows:*
  1. *P. 3: delete the title and replace with Introduction as a Level 1 header*
  2. *Use double-quotation marks (“like this” not ‘like this’)—correct throughout.*
  3. *P. 3: change 5th Edition of the to fifth edition of the [and remove the italics] and close up the space on both sides of the em dash (which can be a hyphen)*
  4. *P. 5: remove the italics on The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men and set in lowercase all of these words.*
  5. *Avoid “and colleagues” and replace with et al.*
  6. *In the text, I would avoid italicization of specific words—this is not necessary or desirable.*
  7. *Unmask any masked material in the revision.*
  8. *Use U.S. English spelling (e.g., behavior, not behaviour)—correct throughout.*
  9. *Item examples in quotation marks should not be italicized.*
  10. *In preparing a revised version of the ms, submit it as a “clean copy,” i.e., not in track change mode.*
  11. *Before submitting the revision, please cross-check text references and the Reference section to ensure that all in-text references are in the Reference section and vice-versa. Please confirm that you have done this in your cover letter.*
  12. *Your revised manuscript should be submitted within 3 months of receipt of this decision Letter. If the revision requires the collection of new data, it should be submitted within 6 months of receipt of this Letter. If you require an extension beyond either of these dates to resubmit, please contact me.*

**Response:** Thank you for the opportunity to revise our manuscript and for the detailed feedback you have provided. The above changes have been implemented in the attached revised main document.

### *Reviewer 1*

*The authors have taken an innovative approach to studying FSIAD, by looking at its dyadic context and using dyadic data to study its links to couple outcomes. Below comments may help to further enhance the quality of the manuscript.*

**Response:** Thank you for reviewing our work and for the helpful specific feedback you have provided and which we address below.

2. *Abstract: The summary of findings is not in line with the results of the study. Specifically, the following sentence seems misleading as to the found associations: “Generally, on days when individuals with SIAD perceived, or their partners reported, higher*

*understanding and lower resentful and insecure responses than usual, they both reported greater sexual well-being and relationship satisfaction." It would be good to try and summarize the results in a more accurate manner.*

**Response:** We appreciate this feedback and recognize that in striving for brevity, our original summary of the results lacked detail. We have made the following changes to the results portion of the Abstract (changes highlighted):

“On days when individuals with SIAD perceived, or their partners reported, greater understanding responses than usual, they both reported higher relationship satisfaction, but also greater sexual distress. Daily perceived or reported greater resentful or insecure responses were associated with lower sexual and relationship satisfaction, and greater sexual distress. Enticing responses showed mixed results. For partners, all daily self-reported response types were positively associated with their own dyadic sexual desire. Prospectively, for individuals with SIAD, perceiving greater understanding, and lower resentful and enticing responses at baseline predicted their own greater sexual and relationship satisfaction, and perceiving greater insecure responses predicted their partners’ greater sexual satisfaction, six months later. For partners, greater insecure responses at baseline predicted their own lower sexual satisfaction and greater sexual distress six months later.”

3. *Method: It would be comfortable for the reader if authors maintained the same order of presenting diary and prospective measures/data/analyses/results (e.g., always first discussing the daily ones and then the prospective ones).*

**Response:** We appreciate this recommendation and have updated the Procedure and Measures sections to match the organization of the Data Analysis and Results sections: first presenting information about the daily diary procedures/measures and then the prospective procedures/measures.

4. *Method: Can the authors include the instructions of the Responses to Sexual Rejection Scale, in order for the example items to be more comprehensible to the readers?*

**Response:** Thank you for this suggestion. We have added the following instructions for the Responses to Sexual Rejection Scale measure in the baseline survey (p. 11; changes highlighted):

“Responses to sexual rejection were examined in the baseline survey using the original (i.e., reported RSRS for partners) and adapted (i.e., perceived RSRS for individuals with SIAD) versions of the 16-item RSRS, composed of four 4-item subscales, one for each of the four sexual rejection response types. Participants were instructed to “Please indicate how frequently you engage in the following ways when your partner declines you for sex.” (original version – reported RSRS) or “Please indicate how frequently your partner responds in the following ways when you decline them for sex.” (adapted version – perceived RSRS).”

We did not add the instructions to the daily diary version of the Responses to Sexual Rejection measure as they are already included in each of the items (i.e., “To what extent did you respond in this way when your partner expressed sexual disinterest today?”) and there were no additional instructions. For readers seeking further details, the complete prospective and daily measures are accessible on OSF (as noted on p. 10)."

“All measures can be found on OSF: <https://doi.org/10.17605/OSF.IO/VXH58>.”

5. *Method: Operationalization of rejection: can the authors clarify which question was posed to assess if rejection had occurred on a specific day, as well as the degree to which both partners' reports of it are linked to each other (so if an enacted rejection always corresponded with a perceived rejection)? Also, although maybe not fitting the scope of this paper, it would be interesting to also consider sexual initiation and rejection strategies, as they both could take many forms, and affect each other. I would recommend including some thoughts on this in the discussion section.*

**Response:** We have included the following in the Measures section to clarify how we assessed for the presence of sexual rejection in the daily diaries (p. 11):

“Participants indicated whether sexual rejection occurred each day by responding to the following face-valid items: “Did your partner say or do something to indicate they were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?” and “Did you say or do something to indicate that you were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?”. Participants indicated frequency on a scale 1 – *Not at all* to 7 – *A lot*, and responses were dichotomized into 1 – *Yes* (i.e., equivalent to ratings of 2 to 7 on the initial, 7-point scale) and 2 – *No* (i.e., equivalent to rating of 1 on the initial, 7-point scale).”

Per the recommendation in Comment #10, we have included frequency of sexual rejection as a covariate in our analyses. As a result, we have added this variable to our Measures section, within which we report the degree to which couple members’ reported frequencies of sexual rejection were correlated (p. 13):

“In our daily and prospective post-hoc analyses, we controlled for both individuals with SIAD’s reported frequency of rejecting their partner and partners’ reported frequency of being rejected. Couple members’ reported frequencies of sexual rejection were moderately correlated ( $r(200) = .47, p < .01$ ).”

Further, we agree that it would be interesting to examine the interaction between sexual initiation and rejection strategies in future research, and have commented on this within the Strengths, Limitations, and Future Research section of the Discussion given that it is beyond the scope of the current paper (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in

which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019). Understanding these dynamics could provide insight into the broader sexual relationship, offering a more comprehensive picture of how couples negotiate sexual desire and interest over time. This approach could build on previous work (e.g., Kim et al., 2020; Pawłowska et al., 2024; Schwenck et al., 2023) by identifying patterns specific to couples affected by SIAD, as well as comparing these dynamics to those in couples without sexual desire challenges.”

6. *Method: Was the experience of sexual coercion also assessed during follow up, as coercion could hypothetically happen for the first time between the two surveys?*

**Response:** We appreciate this question and agree that this is a possibility. Unfortunately, we do not have data regarding non-physical sexual coercion at follow-up. We have added this limitation to our manuscript (p. 31):

“In our prospective analyses, we measured whether non-physical sexual coercion had ever occurred within the relationship at baseline. However, it is possible that, for some couples, this behavior may have first occurred between the baseline survey and the 6-month follow-up survey, and such instances were not captured in our analyses.”

7. *Method: The difference between enticing responses to rejection and sexual coercion are not sufficiently discussed in the introduction, and the example items reported here do not help to make this distinction clear. Can the authors elaborate on this distinction, both on a theoretical level as based on the collected data?*

**Response:** Thank you for identifying this opportunity for clarification. We have made the following addition to the Introduction to elucidate the distinction between enticing responses after controlling for non-physical sexual coercion, and non-physical sexual coercion (p. 7):

“Based on the mixed results of enticing responses found in previous studies (Kim et al., 2019; Schwenck et al., 2023), it may be that the enticing response items capture behaviors that can have varying outcomes based on their intent and emotional tone. Thus, by controlling for non-physical sexual coercion, we aimed to examine the associations of enticing responses that represented persistent seductive invitations for sexual activity while respecting the autonomy of individuals with SIAD, as opposed to those that relied on psychological or emotional pressure to undermine their consent.”

Within the Measures section, we report the strength of the correlation between the two variables in the non-physical sexual coercion section (p. 14) and the exact values are found in Tables 3 and 4:

“Non-physical sexual coercion was weakly (daily) and moderately (prospective) correlated with enticing responses for both couple members.”

8. *Method: For assessing sexual desire, it seems that the authors only used the partner-focused subscale of the SDI-R--it would be good to make that more explicit in the Measures section.*

**Response:** We have specified this through the following addition (p. 14; changes highlighted):

“Dyadic sexual desire was assessed with items from the partner-focused subscale of the Sexual Desire Inventory-2 (SDI-2; Spector et al., 1996), with higher scores indicating higher desire for one’s partner.”

9. *Method: In reporting the assessment of sexual distress, it would be good to report an example item for the daily and baseline/follow up measure separately, just as for the other measures. Additionally, it would be good to report more clearly on the versions of the scales used, including correct parenthetical citations.*

**Response:** Thank you for these recommendations to improve clarity. We have reported separate example items for the daily and prospective measures, and have made the following change to clarify the versions of the sexual distress scales used (pp. 15-16; changes highlighted):

**Daily.** The three-item Sexual Distress Scale (SDS-3; Lin et al., 2024) was used to assess daily sexual distress (i.e., “How often did you feel... (1) distressed about your sex life? (2) worried about sex? (3) sexually inadequate?”). Total scores range from 0 to 12. This measure has shown strong internal validity in samples across countries, gender identities, and sexual orientations (Lin et al., 2024). In the current study, items showed good consistency for individuals with SIAD ( $R_c = .87$ ) and partners ( $R_c = .76$ ).

**Prospective.** In the baseline and 6-month surveys, sexual distress was measured using the 5-item Sexual Distress Scale-Short Form (SDS-SF; Santos-Iglesias et al., 2020). An example item is: “How often did you feel stressed about sex?”. Total scores range from 0 to 20. The SDS-SF has demonstrated strong internal validity in samples of women and men (Santos-Iglesias et al., 2020; Santos-Iglesias et al., 2018). Items displayed high internal reliability for individuals with SIAD ( $\alpha = .92$ ) and partners ( $\alpha = .88$ ).”

10. *Results: It would be interesting to also report frequencies of sexual rejection, and include them as covariate on the couple level. It would also be interesting to see how the frequency of rejection is related to the type of response to rejection, as well as to the outcomes studied here.*

**Response:** We appreciate this recommendation. We originally (i.e., in our pre-registered analyses) chose not to control for the frequency of responses to sexual rejection as our initial cross-sectional research found that there was not a high degree of variance in frequency of sexual rejection in couples coping with SIAD (Schwenck et al., 2023). In light of your suggestion, we ran post-hoc analyses including frequency of sexual rejection as a covariate. We found no changes in the significant daily associations, and two changes in the prospective associations (a new significant finding and a non-significant finding that was

previously significant). We have added reference to the covariate analysis to the manuscript in the locations detailed below. We have also added the frequency of sexual rejection variable to the correlation tables included in the manuscript so that readers may review how this variable is related to the other study variables at the daily and prospective levels.

- Current Study (p. 7): “In deviation from our pre-registration, we conducted post-hoc analyses with two covariates. First, we examined non-physical sexual [...] Second, frequency of sexual rejection was included as a covariate in all of the daily and prospective analyses to determine the unique contribution of the response types in sexual and relationship well-being, independent of how often rejection occurs.”
- Measures (p. 13; *Note*: We chose to use the baseline reports of average frequency of sexual rejection because the average frequency of sexual rejection that occurred over the daily diaries would have been inaccurate due to missing data on days when diaries were not completed. For instance, relying solely on data from completed diary days could misrepresent the true frequency of sexual rejection. This approach could inadvertently introduce bias, as participants may be less likely to complete diaries on days when they experience sexual rejection.):

**“Frequency of Sexual Rejection**

Frequency of sexual rejection was measured at baseline using face-valid items: “On average, how often do you decline your partner for sex? In other words, how often is your partner interested in sex, but you are not interested at that time?” and “On average, how often does your partner decline your sexual advances? In other words, how often are you interested in sex, but your partner is not interested at that time?”. Participants rated frequency on a scale of 1 – *Never* to 5 – *Daily*. Thus, each item’s total score ranges from 1 to 5.

In our daily and prospective post-hoc analyses, we controlled for both individuals with SIAD’s reported frequency of rejecting their partner and partners’ reported frequency of being rejected. Couple members’ reported frequencies of sexual rejection were moderately correlated ( $r(200) = .47, p < .01$ ).”

- Results (p. 23):

**“Controlling for Frequency of Sexual Rejection**

After including the frequency of sexual rejection as a covariate, we found no changes in the daily results. Longitudinally, one new significant effect emerged: individuals with SIAD who reported greater perceived insecure responses at baseline reported lower relationship satisfaction six months later. Additionally, one previously significant result was non-significant: after controlling for both frequency of sexual rejection and non-physical sexual coercion, individuals with SIAD who perceived greater enticing responses at baseline did not report significantly lower sexual satisfaction six months later.”

- Discussion overview (pp. 23-24): “Additionally, after controlling for the frequency of sexual rejection, the daily results remained consistent, and there were two changes in the longitudinal results.”
- Discussion of insecure responses (p. 28; changes highlighted): “After controlling for frequency of sexual rejection, when individuals with SIAD perceived greater insecure responses at baseline, they reported lower relationship satisfaction, and their partners reported increased sexual satisfaction six months later.”

- Discussion of enticing responses (pp. 29-30; changes highlighted): “Over time, when individuals with SIAD perceived greater enticing responses at baseline, they reported a decrease in sexual satisfaction six months later. However, after controlling for both non-physical sexual coercion and frequency of sexual rejection, this effect was no longer significant and a second, seemingly contradictory effect emerged: when partners reported greater enticing responses, individuals with SIAD reported greater sexual satisfaction. A potential explanation is that individuals with SIAD who perceived more enticing responses at baseline may have been more distressed (e.g., guilty, frustrated) due to frequent rejection interactions, and thus, may be primed to interpret neutral interactions as a partner’s attempts to initiate sexual activity and, as a result, persistent partner unresponsiveness (Brassard et al., 2012; Carrère et al., 2000; Hogue et al., 2019). However, when partners reported greater enticing responses, these intentional, non-coercive interactions may have made the individuals with SIAD feel sexually desirable and, consequently, enhanced their sexual satisfaction, independent of sexual rejection frequency (Frederick et al., 2017; Metz & McCarthy, 2007).”

11. *Results: It seems that all studied responses to rejection were associated with higher sexual desire of partners. Can the authors elaborate on this result and its implications?*

**Response:** Thank you for identifying a pattern that would benefit from elaboration. We have included the following discussion of this pattern within a new paragraph in the Discussion offering a broader interpretation of the results (p. 24):

“For partners only, daily, all response types were positively associated with their own partner-focused sexual desire. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher partner-focused sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013).”

12. *Results: The tables where the analysis results are reported should be added to the main article for ease of reference, instead of adding them as supplemental material.*

**Response:** Thank you for this recommendation. We have added these tables to the article and referenced them in the Results section (p. 20):

“The results of the daily and prospective analyses can be found in Tables 5 and 6, respectively.”

13. *Discussion: Comparably to the point made regarding the abstract, the summary of results in the first paragraph of the discussion ("Results generally aligned with our hypotheses: when women and gender diverse individuals with SIAD perceived, and their men, women, and gender diverse partners reported, greater understanding and lower resentful and insecure responses, both partners reported greater sexual satisfaction,*

*partner-focused sexual desire, and relationship satisfaction, and lower sexual distress.") is not in line with the findings of the study and is thus misleading.*

**Response:** We appreciate that this summary would benefit from clarification. We have replaced the quoted section above with the following (p. 23):

“With some notable exceptions which are discussed throughout this section, our significant results generally aligned with our hypotheses: perceived and reported greater understanding responses, lower resentful responses, and lower insecure responses, were linked to greater sexual and relationship well-being outcomes.”

*14. Discussion: The authors have structured the discussion section based on the four types of responses studied. Although it is interesting to read the possible explanations for each finding that is inconsistent with the study hypotheses, discussing the findings in this structure seems fragmented and too detailed, preventing the reader from forming an integrated view of the results and new insights based on the confluence of findings. Moreover, it prevents the authors from making interesting links and reaching overarching conclusions, for instance regarding the fact that sexual desire was associated with each and every response to rejection. A helicopter view on the results and a discussion of their implications on a higher level would be a recommended addition to this section.*

**Response:** We appreciate this recommendation and agree that a helicopter view of the results at the beginning of the Discussion offers the reader an opportunity to integrate the more nuanced interpretations of the individual responses within a broader conceptualization of the results. We have added the following paragraph to the Discussion (p. 24):

“From a broader perspective, several interesting patterns emerged in the data. At the daily level, all response types were positively associated with sexual distress for both couple members. Perceiving or reporting a higher frequency of any response type may indicate that sexual rejection—a significant source of sexual distress, as described qualitatively by both enactors and receivers in couples coping with low desire (Frost & Donovan, 2019)—occurred that day. For partners only, daily, all response types were positively associated with sexual desire for their partner. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher partner-focused sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013). Among the daily analyses, resentful and insecure responses showed the greatest number of significant associations. In line with our prior cross-sectional research (Schwenck et al., 2023), these results suggest that understanding and enticing responses may operate through more context-dependent mechanisms and involve additional moderating variables in their associations with couples’ daily well-being. Comparing the two types of analyses, the daily data yielded five times more significant associations than the prospective data. Further, daily findings that aligned with our hypotheses generally exhibited medium to large effect sizes with narrower credible intervals, whereas the expected prospective results showed small to medium effect sizes



with larger confidence intervals. These patterns suggest that responses to sexual rejection may have stronger implications for couples' same-day outcomes relative to their long-term outcomes.”

## **Reviewer 2**

*This manuscript presents the findings of a study on daily and prospective associations between responses to sexual rejection and sexual and relationship satisfaction, sexual desire, and sexual distress of women and gender diverse individuals with SIAD and their men, women, and gender diverse partners.*

*The study is interesting and well-conducted. I mostly have some questions and comments which, when addressed, will only further strengthen the paper, or so I hope.*

**Response:** We appreciate your positive response and insightful comments on our paper. We believe your feedback has strengthened the manuscript.

15. *Conceptually, although I appreciate the reference to various models (including those introduced by Rosen & Bergeron, 2019, Prekatsounaki et al., 2022, and van Anders et al., 2022) that focus on dyadic processes, I was struggling a bit on how exactly the selected model (IERM, Rosen & Bergeron, 2019) relates to the variables focused on in the current study. That is, the study doesn't seem to provide a test of the model per se. Instead, the model seems to guide some of the ideas explored in this paper. Why did the authors decide to focus on the questions they did, while they, instead, could have decided to test some of the IERM's implications more directly? For example, the authors write: "As outlined in the IERM (Rosen & Bergeron, 2019), more understanding—and less resentful and insecure—responses may promote a secure relational environment and support effective emotion regulation, thus, fostering couples' greater sexual well-being and relationship satisfaction." It would have been interesting to look at this. Especially if lags would have been explored (e.g., understanding responses today may increase the likelihood of no rejection the following day or the next time the partner expresses interest in a sexual interaction). I am just wondering. Of course, I understand that choices need to be made, about the focus of a particular study or manuscript, but I found the connection between theory and study variables (apart from the fact that the findings do not seem to support these ideas that strongly) not very clear.*

**Response:** Thank you for identifying that the link between the IERM and our study would benefit from clarification within our manuscript. While we did not test the IERM directly, the theory highlights proximal interpersonal factors as key predictors through which couples navigate sexual challenges. As a result, the IERM provided the rationale for focusing on sexual rejection responses as a meaningful way to examine proximal factors associated with couples' coping with SIAD. This rationale is referenced in the Introduction (p. 5):

“Indeed, as posited in the IERM (Rosen & Bergeron, 2019), it is possible that responses to sexual rejection are best conceptualized as a proximal factor given that they are

theoretically expected to vary day-to-day alongside other fluctuating variables (e.g., mood, affection; Byers & Heinlein, 1989; Luginbuehl et al., 2024).”

Additionally, as one of the initial studies examining responses to sexual rejection—and the first to examine daily and longitudinal associations—our primary goal was to develop a foundational understanding of these associations before hypothesizing and assessing potential mechanisms. Indeed, based on our findings, it seems as though some of the response types may be more nuanced than we originally hypothesized. For example, we found that on days with greater reported and perceived understanding responses than usual, individuals with SIAD and partners both reported greater relationship satisfaction, but also greater sexual distress. Thus, greater understanding responses may not only facilitate more adaptive emotion regulation strategies (e.g., approach, acceptance), but may also promote less adaptive strategies (e.g., avoidance), with implications for subsequent sexual outcomes. Thus, while we agree that this would be an intriguing avenue for future research, testing the mechanisms proposed by the IERM was outside the scope of this project. We have made the following addition to the Current Study section to outline this choice (p. 6).

“Further, although our hypotheses were informed by the IERM (Rosen & Bergeron, 2019), the goal of this study was to develop a better understanding of the direct effects between responses to sexual rejection and sexual and relationship well-being outcomes, as a foundation for further research.”

We have also highlighted this as a potential avenue for further study in our Strengths, Limitations, and Future Research section of the Discussion (pp. 31-32).

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019).”

*16. Did the authors consider using an ESM instead of daily diary approach? The former would have allowed for a more independent assessment of all variables, no?*

**Response:** Thank you for raising this point. It is true that ESM could offer a more fine-grained assessment of variables compared to daily diaries, as participants would not be required to reflect on their entire day. However, we chose to go with a daily diary approach for a couple of reasons. First and foremost, sexual rejection is unlikely to occur multiple times a day. Second, sexual rejection and its associated responses are described as a salient experience (e.g., Frost & Donovan, 2019), such that participants are likely to remember it fairly accurately when asked about it at the end of the day (Yonelinas & Ritchey, 2015). Thus, we chose the daily diary approach as it strikes a practical balance between capturing daily variability and minimizing participant burden. While ESM provides real-time assessments, it can be logistically demanding and potentially intrusive for participants, which may impact adherence and data quality (Horstmann, 2021). We believe that the daily diary

approach allows for robust insights into day-to-day dynamics that may not be comprehensively captured by ESM, while maintaining participant convenience and engagement.

*17. I found the inclusion of the sexual coercion variable confusing. On what theoretical grounds was it included? Should coercion be considered another possible response to rejection (so, a fifth?)? The percentages of individuals reporting having experienced or applied coercion seems high to me. Were there couples who reported high frequencies/incidences of this? And if so, should they be included in the study?*

**Response:** Thank you for these questions. As mentioned in response to Comment #7, we have added the rationale for the inclusion of non-physical sexual coercion to the Introduction (p. 7). Future research may choose to examine the intent and emotional tone associated with enticing response behaviors in order to determine if this response type may be better conceptualized as two or more separate factors. We have added this potential direction to our Strengths, Limitations, and Future Research section of the Discussion (p. 31):

“To further elucidate the role of enticing responses, future research may benefit from examining the intent and emotional tone of enticing behaviors.”

Regarding the prevalence of non-physical sexual coercion within the sample, research suggests that as many as 50% of heterosexual couples report sexual coercion directed at a female couple member (Brousseau et al., 2011; O’Leary & Williams, 2006). Thus, the rates seen in our study (ranging from 23.0% to 38.2%) are—unfortunately—within the expected range. The mean frequencies of non-physical sexual coercion reported by both couple members at baseline were:  $1.28 \pm 2.1$  (individuals with SIAD) and  $1.04 \pm 2.0$  (partners), which represented an approximate rating of “1 – Not in the past year, but it did happen before”. At the daily level, the means were:  $1.21 \pm 0.45$  (individuals with SIAD) and  $1.12 \pm 0.37$  (partners), which represented an approximate rating of “1 – Not at all”. We maintained all couples in the analysis, independent of reported frequency of non-physical sexual coercion, to maintain representation of the experiences of couples coping with SIAD.

*18. Which brings me to another question. Could intercorrelations be provided for the key study variables? For example, in this case, how was use/experience of coercion associated with variables such as sexual distress and relationship satisfaction in the daily diary component?*

**Response:** In the previous iteration of this manuscript, there was a statement in the Results section that correlation tables for all study variables were provided in the supplementary materials on OSF. However, the Reviewer comments have highlighted the value of quick access to the variables’ correlations. Thus, we have moved the correlation tables from the supplemental materials on OSF into the manuscript (see Tables 3 and 4).

*19. Also, and more in general, what were the intercorrelations among the four possible responses? I assume people could have expressed/experienced combinations of responses. I understand that, here, too, decisions had to be made, but I would have been*

*very interested in seeing analyses that combined the predictor variables (the four responses). Perhaps days when partners express understanding are, at the same time, days when other, more negative responses are expressed as well? (Which could also explain the positive association with sexual distress?). It would be good to at least learn a bit more, as reader, about how distinct or not responses to rejection were.*

**Response:** We agree that future research in the responses to sexual rejection literature would benefit from examining associations of the interactions between the response types – similar to those conducted by Kim et al. (2020) with sexual rejection behaviors. As this was outside of the scope of the current study, we have referenced it as a potential direction for further exploration in our Strengths, Limitations, and Future Research section of the Discussion (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection.”

Additionally, as mentioned in our response to Comment #19, we have moved the correlation tables from the supplemental materials on OSF into the manuscript to facilitate readers’ understanding of variables’ intercorrelations (see Tables 3 and 4).

*20. Some other observations and questions:*

*The authors write: "Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) and conducted in Mplus (Version 8). The women and gender diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples." I am not that familiar with the use of residual dynamic structural equation in dyads but wonder how it deals with (in)distinguishability between actors/partners? In APIM, prior to making any statements on gender effects, Kenny et al., 2006 recommend actual tests of distinguishability, as not all APIM analyses with (even mixed gender) couples statistically meet the criterion for distinguishability. I assume this is incorporated in these tests?*

**Response:** Thank you for highlighting that how we handled distinguishability in our analyses could have been more clearly defined. In this study, the distinguishing factor between partners was not gender, but rather the diagnosis of SIAD. Kenny et al. (2006, p. 129) define indistinguishable dyads as having equal means and variances for each variable and having the same intra- and interpersonal correlations. However, results from our previous study in this population found significant differences in couple members’ mean understanding responses and sexual desire (Schwenck et al., 2023), thus indicating that these couple members are distinguishable. While we recognize the importance of testing for distinguishability when analyzing dyads with potentially confounding variables such as gender, in our case, the primary variable differentiating the dyad members was the clinical diagnosis. As a result, we can confirm that our analyses were aligned with Kenny et al.’s (2006) definition of distinguishability. Additionally, other experts argue that conceptual

reasons for assuming distinguishability are paramount (e.g., Gonzalez & Griffin, 1999). We have amended our statement regarding distinguishability in the manuscript to state (p. 16; changes highlighted):

“Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) and conducted in *Mplus* (Version 8). The women and gender diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples, due to the clinical diagnosis.”

21. *Although the authors indicate that couples were ineligible to participate if they "were undergoing treatment for sexual challenges or fertility treatment, actively trying to conceive, pregnant, breastfeeding, within one-year postpartum, or if one or both members self-reported a severe and untreated mental or physical illness." Was it checked if some of these things changed over the course of the study?*

**Response:** Thank you for identifying an area for clarification. We have added the following statement to the Procedure section to elucidate what factors were confirmed throughout the study (p. 10):

“Participants’ continued eligibility was confirmed at the beginning of the 6-month survey, with the exception of severe and untreated illness, which was only assessed during the initial screening.”

22. *The study was inclusive in terms of gender and sexual orientation. Have the authors considered the possibility that, given the relatively sizable number of non-heterosexual-identified partners, this, while making the sample richer and more interesting, may also make interpretations more challenging? I understand and support the general goal of extending beyond traditional samples of self-identified binary and/or heterosexual individuals, but most theories and I would guess the majority of studies on sexuality and intimate relationships are based on them. Do we have sufficient theoretical or empirical grounds to assume that relationship and sexual dynamics can be assumed to work in identical ways for individuals, and couples, representing such diversity in gender and sexual orientation? I wonder if the authors would be willing to add some thoughts on this to the discussion.*

**Response:** Thank you for this insightful observation. We agree that the inclusion of a diverse sample in terms of gender and sexual orientation adds both richness and complexity to the interpretation of our findings. We are continuously reflecting on these considerations as we work to ensure our research remains accessible and inclusive, while maintaining clarity in its interpretability. Regarding your specific point, we hypothesize that an individual's identification with gendered cultural norms and values may be a more significant factor in shaping relationship and sexual dynamics than gender or sexual orientation alone. We have made the following addition to the Discussion (pp. 30-31; changes highlighted) to reflect these considerations:

“While our study sample included data from couples with non-majoritized identities, most individuals with SIAD were women (96.6%), most partners were men (87.1%), and most participants were heterosexual (74.1%), Euroamerican (81.6%), and had a high combined annual income (i.e., >\$80,000; 56.9%), thus limiting the generalizability of our results. Further, as existing theories and prior research in sexuality and intimate relationships are often grounded in traditional binary gender models, the generalizability of these theories to diverse populations requires ongoing reflection and caution. Indeed, there may be sociocultural dynamics surrounding sexual rejection and responses to sexual rejection that this study does not have sufficient data to address. Specifically, future research could benefit from exploring how individuals' alignment with societal expectations around relationship and sexual norms—across gender identities and sexual orientations—affects their response to sexual rejection and its outcomes.”

23. *It is a pity that I, as a reviewer of this manuscript, am not provided with the link of the pre-registration. Masked reviews, sure, but I am not able this way to check if everything announced in the pre-registration was done and followed through. (Perhaps more for the Editor than for the authors to consider). [Editor's note: What would the purpose be of noting pre-registration if a reviewer cannot access it? Or maybe the reviewer did not know how to access it?]*

**Response:** We understand that this is not an ideal scenario. Unfortunately, through OSF, the pre-registration was masked when the view-only link was created for the project. In the future, we will attach the pre-registration document as a supplemental file for the reviewers. The file is now accessible at: <https://doi.org/10.17605/OSF.IO/9CTHK>.

24. *Finally, also perhaps more something for the discussion, I missed a discussion on the relevance of responses to rejection by the SIAD participants, not their partners. The current study seems to suggest that all sexual activity in couples where one person is diagnosed with SIAD is initiated by the partner, and that only the partner has to deal with rejection. Yet, I would assume that individuals with SIAD also do initiate sex, or show interest in sexual interactions, at least sometimes. And their partners, at least sometimes, may also show rejection responses. This has been studied in nonclinical samples (see work by de Graaf & Sandfort, 2004, Baumeister & Dhavale, 2001, and also a recent ESM study by Pawlowska et al., 2024). It is not entirely clear to me if the authors collected data on initiation of sexual activity by the individuals with SIAD, but if so, it would be interesting to hear more about the proportion of days that the individual with SIAD versus the partner expressed interest, or even about how often it coincided. More in general, it isn't entirely clear (also not from the supplemental materials, including the questionnaires), how this was approached. I don't seem to see questions about initiation, but only on rejection. Either way, my main point here is that I wonder if the authors could share their ideas about the potential relevance of including partner responses not to rejection but to the expression of interest, what might predict this (both the responses and SIAD individuals expressing interest), how it may unfold, dynamically, and possibly affect longer-term outcomes. Related to this, previous studies, including Schwenck and colleagues (2023) and Pawlowska and colleagues (2024) included or focused on non-SIAD samples, revealing interesting patterns, and raising questions about*

*what mechanisms or dynamics might be specific to couples with SIAD and couples that do not deal with problems related to sexual desire. Again, perhaps the authors could address some of these questions and present recommendations, where they think relevant, for future research.*

**Response:** We appreciate and share your interest in the entirety of the dynamics/interactions that couples (including those coping with SIAD) undergo with sexual initiation, acceptance, and/or rejection. Given how complex these interactions can be, though, as highlighted throughout your comment, it was outside the scope of this project to examine and address every aspect of these interactions.

First, we agree that individuals with SIAD may also initiate sex or show interest in sexual activity, albeit much less frequently (Frost & Donovan, 2019), and we did not intend to suggest that only partners of individuals with SIAD initiate sexual activity. We have added the following to our rationale for focusing on partners' responses to sexual rejection to highlight this (p. 6; changes highlighted):

**“Though each couple member may initiate and reject sexual activity, the interpersonal dynamics of sexual rejection that cause significant distress for couples with SIAD reflect circumstances in which the individuals with SIAD are the ones frequently declining sex, and hence their partners frequently experience the rejection (e.g., Frost & Donovan, 2019).”**

Second, we agree that how couple members initiate sexual activity may play a role in potential sexual rejection and responses to sexual rejection. However, the focus of this research was specifically on sexual rejection responses and as a result we do not have data regarding the initiation activity of couple members. Similarly, while it could be elucidating to conduct our analyses in a sample of couples not affected by SIAD and then compare the results, we did not collect those data for the current project. Our focus was on this clinical sample and informing potential treatment targets. We have included the following discussion of directions for future research in our Discussion (pp. 31-32):

**“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019). Understanding these dynamics could provide insight into the broader sexual relationship, offering a more comprehensive picture of how couples negotiate sexual desire and interest over time. This approach could build on previous work (e.g., Kim et al., 2020; Pawłowska et al., 2024; Schwenck et al., 2023), by identifying patterns specific to couples affected by SIAD, as well as comparing these dynamics to those in couples without sexual desire challenges.”**

### Reviewer 3

25. *This manuscript aims to examine the daily and prospective associations between perceived and partner-reported responses to sexual rejection and sexual well-being/relationship satisfaction among both couple members for those couples in which one female partner meets the criteria for Female Sexual Interest/Arousal Disorder (SIAD). There is much to like about this manuscript. It is incredibly well written and does a nice job of summarizing the existing literature in this domain. The authors have recruited a seemingly well-powered study with an impressive design that assesses their variables of interest dyadically and longitudinally. They also utilize relatively new, complex models to estimate their within-person daily associations. Despite these clear strengths, I had some concerns that dampened my enthusiasm for this manuscript. I expand on these concerns below.*

**Response:** We appreciate your enthusiasm for our manuscript and the thoughtful comments you have provided regarding how to address your concerns.

26. *Perhaps most notably, I think the authors could offer a bit more transparency in the summary/take-away of their findings. They state on pages 22 and 23 of their Discussion section that "results generally aligned with our hypotheses: when women and gender diverse individuals with SIAD perceived, and their men, women, and gender diverse partners reported, greater understanding and lower resentful and insecure responses, both partners reported greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress." Although this is technically true, the authors conducted numerous analyses to test this claim—e.g., for understanding, resentful, and insecure responses (that is, excluding enticing responses), the authors conducted 32 different analyses across their four dependent variables and daily/prospective analyses—and not every path was significant. In fact, in looking at Tables 3 and 4, it appears that less than half of their tested paths emerged as significant. I think it would be helpful for the authors to be clearer about which paths emerged as significant, which paths did not, and speculate about why inconsistencies may have emerged. They do acknowledge the null versus significant paths in their subsections highlighting each type of sexual rejection, but I think it would be helpful if they were more transparent about the fact that their findings were not as straightforward as their summary statements might suggest. As well as speculate about why that might be the case.*

**Response:** We appreciate this recommendation and have made the following changes to increase the transparency of our findings within the Discussion.

First, we have amended the statement summarizing the results as follows (p. 23):

“With some notable exceptions which are discussed throughout this section, our significant results generally aligned with our hypotheses: perceived or reported greater understanding responses, lower resentful responses, or lower insecure responses, were linked to greater sexual and relationship well-being outcomes.”



Next, we added a statement regarding the overarching patterns seen in the significant associations, including the number of significant associations and their effect sizes within the daily and prospective analyses, and implications for interpretations (p. 24):

“From a broader perspective, several interesting patterns emerged in the data. At the daily level, all response types were positively associated with sexual distress for both couple members. Perceiving or reporting a higher frequency of any response type may indicate that sexual rejection—a significant source of sexual distress, as described qualitatively by both enactors and receivers in couples coping with low desire (Frost & Donovan, 2019)—occurred that day. For partners only, daily, all response types were positively associated with their own dyadic sexual desire. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher dyadic sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013). Among the daily analyses, resentful and insecure responses showed the greatest number of significant associations. In line with our prior cross-sectional research (Schwenck et al., 2023), these results suggest that understanding and enticing responses may operate through more context-dependent mechanisms and involve additional moderating variables in their associations with couples’ daily well-being. Comparing the two types of analyses, the daily data yielded five times more significant associations than the prospective data. Further, daily findings that aligned with our hypotheses generally exhibited medium to large effect sizes with narrower credible intervals, whereas the expected prospective results showed small to medium effect sizes with larger confidence intervals. These patterns suggest that responses to sexual rejection may have stronger implications for couples’ same-day relative to their long-term outcomes.”

27. *Regarding the numerous analyses, the authors are obviously increasing their risk of Type I error. As can be seen in the supplemental materials on OSF, each type of sexual rejection is fairly highly correlated with the other types of sexual rejection (with perhaps the exception of understanding, which could be due to its fairly low reliability). Thus, it seems to me that it would be most appropriate to include them all in a single model simultaneously even though Kim et al. (2019) did not use this approach in their scale development—especially given that the authors want to draw meaningful conclusions regarding the unique aspect of each type of sexual rejection. By controlling for shared variance across the four different types in such a simultaneous model, the authors would be better suited to demonstrate their unique associations with each of their four outcomes. Furthermore, they could compare the strength of different types to see if they significantly differ from one another. Not only would such an approach be a better test of the authors' predictions, it would reduce their 32 models down to 8 (one for each daily and prospective outcome).*

**Response:** Thank you for this recommendation. To begin, we would like to clarify that we did not run 32 models for these analyses. We ran 5 daily and 5 prospective models - one for each of the response types (i.e., understanding, resentful, insecure, enticing, and enticing with

covariate non-physical sexual coercion), and each model included all of the outcomes. We have clarified this approach in the Data Analysis section (p. 16):

“Thus, we had a total of five daily and five prospective models.”

Additionally, due to the high degree of correlation between insecure and resentful responses in prior research (Kim et al., 2019; Schwenck et al., 2023), we separated the analyses by predictor rather than by outcome to prevent multicollinearity (Dormann et al., 2013; Vatcheva et al., 2016). While this approach helped reduce potential statistical issues with multicollinearity within single models, we acknowledge that testing separate models for each predictor could still introduce some redundancy and an increased risk of Type I error. However, the correlations between the predictors in our dataset were all below .70 (daily correlations ranged from .01 to .65, and longitudinal correlations ranged from .02 to .61; see Tables 3 and 4 respectively), suggesting that the models were not highly redundant. This approach allowed us to examine the unique contributions of each predictor while minimizing overlap.

28. *I also think it would be helpful if the authors could clarify their rationale for using the daily data to examine within-person associations rather than daily prospective (i.e., lagged) associations like they did for the 6-month data. To be clear, I don't have a problem with what they did, but it did occur to me that, if the authors are interested in providing insight into directionality (as they claim), they might be missing an opportunity to examine daily directionality (in addition to the long-term directionality they already explore). If the authors disagree with this lagged suggestion, that is fine; but I do think they need strong justification in the manuscript so that other readers know why they chose not to model daily lagged changes.*

**Response:** We agree that it would be valuable to be able to examine daily directionality within these data. Unfortunately, since data collection was limited to days when participants indicated that sexual rejection had occurred, we did not have sufficient consecutive days of data across couple members to model daily lagged changes as these analyses are more sensitive to missing data than the residual covariance approach (Little & Rubin, 2002; Wickham & Knee, 2013). We have clarified this information in the manuscript (pp. 17-18):

“We did not model daily lagged changes due to insufficient consecutive days of data across couple members, and because this approach is more sensitive to missingness of consecutive days of data compared to autoregressive modelling (Little & Rubin, 2002; Wickham & Knee, 2013).”

29. *More minor concerns:*

*The authors noted in their Introduction that mood and affection can impact responses to sexual rejection. If they assessed mood and affection, it would be ideal for them to control these variables (especially within-person variance in these variables) to demonstrate that the types of sexual rejection yield independent associations with sexual*

*and relationship outcomes and that they are not accounted for simply by changes in mood and affection.*

**Response:** We appreciate this suggestion. We did mention in the Introduction that we would expect responses to sexual rejection to vary alongside other fluctuating variables such as mood or affection, which is the part of the rationale for taking a daily diary approach. However, these associations were theorized and have not been confirmed. Thus, while it was outside the scope of the current study, we agree that future research should explore the implications of additional factors (e.g., mood, affection) as potential moderators and mechanisms to further elucidate the associations between responses to sexual rejection and sexual and relationship outcomes. We have noted the value of further exploring mechanisms in the Strengths, Limitations, and Future Research section of the Discussion (pp. 31-32):

“Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019).”

30. *I think the authors could be clearer throughout (including in their title and abstract) that their sample is specific to FEMALE sexual interest/arousal disorder. Many times, they refer to "couples affected by SIAD" when, in reality, their results are specific to "couples affected by female SIAD."*

**Response:** Thank you for this suggestion. Within our abstract, we have clearly identified our participants as “Women and gender diverse individuals diagnosed with SIAD and their partners”. In the manuscript, the readers are immediately oriented to our explanation about our choice to not include “Female” when referencing SIAD within Footnote #1 (p. 1). Moreover, clinically low sexual desire in males is termed “Male Hypoactive Sexual Desire Disorder (MHSDD)”, thus, any potential confusion is minimized as there is no “male” SIAD. Finally, we have clarified our use of terminology such as “couples affected by SIAD” within Footnote #1 (p. 1):

“Further, we refer to “couples affected by SIAD” or “couples coping with SIAD” in accordance with clinical and theoretical models that underscore the importance of conceptualizing SIAD at the dyadic level, as a couple-level variable, rather than attributing the burden of SIAD to an individual within the couple (Dewitte, 2014; Girard & Woolley, 2017; Prekatsounaki et al., 2022; van Anders et al., 2022).”

31. *Tables 3 and 4 are not mentioned in the text even though they should be.*

**Response:** Thank you for noting this. Reference to the results tables can now be found in the text (p. 20) as Tables 5 and 6.

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**Daily and Prospective Associations Between Responses to Sexual Rejection and Sexual Well-Being and Relationship Satisfaction in Couples Coping with Sexual Interest/Arousal Disorder**

## Abstract

Prior cross-sectional research established that four distinct responses to sexual rejection are associated with sexual and relationship well-being among couples affected by Sexual Interest/Arousal Disorder (SIAD). Examining these associations daily and prospectively will provide insight into within-person variations, temporality, and directionality. Women and gender-diverse individuals diagnosed with SIAD and their partners ( $N = 232$  couples) completed a baseline survey, 56-day diary, and 6-month follow-up survey, assessing responses to sexual rejection, sexual satisfaction, dyadic sexual desire, sexual distress, and relationship satisfaction. Post-hoc exploratory analyses controlled for non-physical sexual coercion and sexual rejection frequency. On days when individuals with SIAD perceived, or their partners reported, greater understanding responses than usual, they both reported higher relationship satisfaction, but also greater sexual distress. Daily perceived or reported greater resentful or insecure responses were associated with lower sexual and relationship satisfaction, and greater sexual distress. Enticing responses showed mixed results. For partners, all daily self-reported response types were positively associated with their own dyadic sexual desire. Prospectively, for individuals with SIAD, perceiving greater understanding, and lower resentful and enticing responses at baseline predicted their own greater sexual and relationship satisfaction, and perceiving greater insecure responses predicted their partners' greater sexual satisfaction, six months later. For partners, greater insecure responses at baseline predicted their own lower sexual satisfaction and greater sexual distress six months later. Results suggest that partner responses to sexual rejection may be useful intervention targets aimed at promoting the sexual well-being and relationship satisfaction of couples coping with SIAD.

**Key words:** sexual rejection, couples, Sexual Interest/Arousal Disorder, sexual and relationship well-being, daily and prospective analyses



## Introduction

Sexual Interest/Arousal Disorder (SIAD<sup>1</sup>; i.e., clinically low sexual desire) is the most common sexual problem reported by women and one of the concerns most frequently reported by couples seeking therapy (Péloquin et al., 2019; Witting et al., 2008). Population-based studies indicate that an estimated 7% to 23% of women endorse symptoms consistent with SIAD (Witting et al., 2008). Per the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders–Text Revision (DSM-5-TR), the core symptoms include absent or low levels of sexual interest and/or arousal that persist for six months or longer, are distressing to the individual, and are not better accounted for by a non-sexual mental disorder, a medical condition, effects of a substance or medication, or severe relationship distress (American Psychiatric Association, 2022). Findings from a controlled study suggest that women with SIAD and their partners report lower sexual and relationship satisfaction and greater sexual distress compared to community couples, though only women with SIAD report lower sexual desire than their community counterparts (Rosen et al., 2019). Since women and gender-diverse individuals with SIAD are often in relationships with partners who have higher desire (Rosen et al., 2019), it is unsurprising that couples coping with SIAD report more frequent occurrences of sexual rejection—declining a partner’s sexual advances—than community couples (Schwenck et al., 2023). Being sexually rejected by a partner is associated with lower sexual and relationship satisfaction in community

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<sup>1</sup> This disorder is named “Female Sexual Interest/Arousal Disorder” in the DSM-5-TR; however, we use the term “SIAD” to accurately represent both women and gender-diverse individuals who were assigned female at birth in our study. When referring to our participants, we use gender additive language such as “women and gender-diverse individuals with SIAD” and “men, women, and gender-diverse partners” to promote inclusion and prevent erasure of experiences (Brotto & Galea, 2022). We also refer to participants as “individuals with SIAD” and “partners” to promote readability and clarity.

Further, we refer to “couples affected by SIAD” or “couples coping with SIAD” in accordance with clinical and theoretical models that underscore the importance of conceptualizing SIAD at the dyadic level, as a couple-level variable, rather than attributing the burden of SIAD to an individual within the couple (Dewitte, 2014; Girard & Woolley, 2017; Rosen & Bergeron, 2019; van Anders et al., 2022).

couples, with effects enduring over multiple days (Byers & Heinlein, 1989; Dobson et al., 2020). Both women with distressing low desire and their partners describe sexual rejection as a significant source of distress in qualitative studies; they note that frequent sexual rejections leads to avoidance of intimacy (e.g., physical affection) in anticipation of enacting or receiving rejection, increased conflict, and lower sexual self-esteem (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). Moreover, clinical and theoretical models conceptualize desire discrepancies as a relationship dynamic that requires consideration of each couple members' socialized expectations and interactions (Girard & Woolley, 2017; Prekatsounaki et al., 2022; van Anders et al., 2022). Our initial cross-sectional research established links between responses to sexual rejection and couples' sexual and relationship well-being (Schwenck et al., 2023), however, daily and prospective analyses are necessary to capture within-person variability in partner responses due to factors (e.g., stress, mood) that fluctuate over time. Such information is crucial to informing interventions that focus on responses to sexual rejection as a novel therapeutic target to promote the sexual well-being and relationship satisfaction of couples coping with SIAD.

Clinical and theoretical frameworks have emphasized the significance of interpersonal factors and dyadic interactions in couples' sexual and relationship well-being in the context of sexual desire difficulties. For example, the *Interpersonal Emotion Regulation Model* of women's sexual dysfunction (IERM; Rosen & Bergeron, 2019) posits that interpersonal factors impact couples' capacity for emotion regulation and managing challenges related to sexual difficulties, and consequently influence couples' sexual and relationship well-being. These interpersonal factors are found at both distal (i.e., relational experiences preceding the sexual difficulty, such as intimacy, attachment, and sexual communication) and proximal (i.e., factors that occur during,

immediately prior to, or following sexual activity, such as affection or a partner's response to a sexual problem) levels. The *Dyadic Interactions Affecting Dyadic Sexual desire* (i.e., DIADICS) model (Prekatsounaki et al., 2022) conceptualizes partnered sexual desire as a dyadic, interdependent process, in which both individuals impact and are impacted by one another. Thus, both an individual's reported actions and their partner's perceptions of these actions concurrently affect, and are affected by, one another's actions and dyadic desire. Further, the heteronormativity theory of low sexual desire in women partnered with men (van Anders et al., 2022) indicates that couples' sexual interactions and expectations are influenced by heteronormative interpersonal dynamics (i.e., inequitable divisions of household labor, blurring of partner and mother roles) and consequences of socialization (i.e., objectification of women and gender norms surrounding sexual initiation). Taken together, these theories suggest that it is essential to consider SIAD at the dyadic level, and to examine the role of both members' interdependent interpersonal factors in couples' well-being.

Prior cross-sectional studies in couples coping with SIAD have identified interpersonal factors that are associated with both couple members' greater sexual and relationship well-being (e.g., sexual communication, motivations to engage in sex; Hendrickx et al., 2019; Hogue et al., 2019), but have rarely examined partners' responses to the low desire. One exception by Rosen et al. (2020), found that when women perceived, and partners reported, more positive (e.g., compassionate) partner responses to women's low sexual/desire arousal relative to negative (e.g., hostile) responses, both couple members reported greater relationship satisfaction, and partners reported greater sexual satisfaction and lower sexual distress. The study was limited by the partner responses measure—which assessed responses on a positive-negative bipolar scale. This measurement prevented more nuanced interpretations, such as positive and negative responses

that may occur simultaneously and comparisons of the effects of positive vs. negative responses, and it also focused only on affective responses and neglected behavioral indices (e.g., affection; attempting to re-initiate sex; Rosen et al., 2020). This study also examined partner responses to low sexual/desire arousal in general, rather than the more specific and common occurrence of sexual rejection.

We addressed the aforementioned limitations in our initial study (Schwenck et al., 2023), which cross-sectionally assessed four established responses to sexual rejection (Kim et al., 2019): understanding (e.g., responsiveness, reaffirming positive regard towards a partner), resentful (e.g., expressing anger, guilt-inducing), insecure (e.g., responding with feelings of sadness or hurt), and enticing (e.g., attempting to re-initiate sex or change a partner's mind). We found that when individuals with SIAD perceived, or their partners reported, greater understanding and lower resentful and insecure responses to sexual rejection, both members of the couple had greater sexual well-being and relationship satisfaction. As outlined in the IERM (Rosen & Bergeron, 2019), more understanding—and less resentful and insecure—responses may promote a secure relational environment and support effective emotion regulation, thus, fostering couples' greater sexual well-being and relationship satisfaction. These findings are consistent with prior research in partner responses to sexual difficulties, indicating that more positive responses (e.g., facilitative, empathic, understanding) to sexual difficulties and less negative responses (e.g., hostile, frustrated, judgmental), are associated with greater sexual and relationship well-being (e.g., Bois et al., 2016; Rosen et al., 2014; Rosen et al., 2020; Rosen et al., 2015).

The results for enticing responses in our initial study were mixed (Schwenck et al., 2023). There were no significant associations for individuals with SIAD, however, when partners

reported greater enticing responses, they reported greater sexual satisfaction and partner-focused sexual desire, and the couple reported greater sexual frequency. Prior research has linked a greater frequency of enticing responses to both greater trait narcissism and responsiveness to a partner's sexual needs (Kim et al., 2019). Together, these results suggest that, while in certain instances, enticing responses may be rooted in entitlement (Zeigler-Hill et al., 2013), in other instances they may signify an interest to fulfill sexual communal needs—indicating that the implications of enticing responses require further exploration and may vary depending on daily context.

Indeed, as posited in the IERM (Rosen & Bergeron, 2019), it is possible that responses to sexual rejection are best conceptualized as a proximal factor given that they are theoretically expected to vary day-to-day alongside other fluctuating variables (e.g., mood, affection; Byers & Heinlein, 1989; Luginbuehl et al., 2024). For example, greater daily couple-level stress (e.g., conflict) is linked to greater sexual desire problems in women (Bodenmann et al., 2006). Our initial study was limited by its cross-sectional nature (Schwenck et al., 2023), which is subject to recall bias, and does not provide information regarding within-person fluctuations in the variables, temporal dynamics, or directionality of associations. Thus, use of daily and prospective analyses may add new and valuable insights into the associations between responses to sexual rejection and couples' sexual and relationship outcomes.

### **Current Study**

The goal of the present study was to examine daily and prospective (i.e., 6-month follow-up) associations between responses to sexual rejection and the sexual well-being (i.e., sexual satisfaction, sexual desire, and sexual distress) and relationship satisfaction of women and gender-diverse individuals with SIAD and their men, women, and gender-diverse partners. The

daily experience design occurs in participants' natural environments and captures their relational experiences closer in time to when they occurred, reducing recall biases and enhancing ecological validity. Daily analyses also provide unique insight into within-person fluctuations, while accounting for temporality (i.e., over the diary period). In addition, through prospective analyses, our results can provide some evidence to support the directionality of the associations between our variables.

Though each couple member may initiate and reject sexual activity, the interpersonal dynamics of sexual rejection that cause significant distress for couples with SIAD reflect circumstances in which the individuals with SIAD are the ones frequently declining sex, and hence their partners frequently experience the rejection (e.g., Frost & Donovan, 2019). We therefore examined individuals with SIAD's perceptions of partner responses to sexual rejection and partners' reported responses to sexual rejection. Further, although our hypotheses were informed by the IERM (Rosen & Bergeron, 2019), the goal of this study was to develop a better understanding of the direct effects between responses to sexual rejection and sexual and relationship well-being outcomes, as a foundation for further study.

Taken together with our prior cross-sectional findings (Schwenck et al., 2023), and clinical and theoretical models highlighting the interdependence of couple members' experiences, we hypothesized—for analyses both daily and prospectively—that individuals with SIAD's perceptions, and partners' reports, of greater understanding, and lower resentful and insecure responses, would be associated with their own (i.e., actor effects) and their partner's (i.e., partner effects) greater sexual well-being and relationship satisfaction (see pre-registration of daily hypotheses on OSF: <https://doi.org/10.17605/OSF.IO/9CTHK>). Given previous mixed findings for enticing responses, we approached these analyses exploratorily. The actor and

partner effects examined are displayed in Figure 1.

In deviation from our pre-registration, we conducted post-hoc analyses with two covariates. First, we examined non-physical sexual coercion (i.e., insistence or pressure used to compel engagement in unwanted sexual activity that does not include physical force; Straus et al., 1996) in the daily and prospective analyses for enticing responses. Sexual coercion is associated with trait narcissism in men and women (Lyons et al., 2022), and compared to a community sample, individuals who engage in non-physical sexual coercion have shown more egocentricity and empathic deficits (DeGue & DiLillo, 2004). Moreover, sexual coercion has been linked to lower sexual satisfaction for both the receiver and enactor (Sáez et al., 2019). Based on the mixed results of enticing responses found in previous studies (Kim et al., 2019; Schwenck et al., 2023), it may be that the enticing response items capture behaviors that can have varying outcomes based on their intent and emotional tone. Thus, by controlling for non-physical sexual coercion, we aimed to examine the associations of enticing responses that represented persistent seductive invitations for sexual activity while respecting the autonomy of individuals with SIAD, as opposed to those that relied on psychological or emotional pressure to undermine their consent. Second, frequency of sexual rejection was included as a covariate in all of the daily and prospective analyses to determine the unique contribution of the response types in sexual and relationship well-being, independent of how often rejection occurs.

## **Method**

### **Participants**

Couples were recruited for a larger study examining psychosocial factors and the sexual and relational well-being of couples coping with SIAD. The current study included data from the baseline, daily diary, and 6-month surveys. See Figure 2 for the flow of participant inclusion in

the daily ( $N = 200$  couples) and prospective ( $N = 170$  couples) analyses. Participants were recruited across two sites in Halifax and Montréal from November 2020 to May 2022 via print and online sources. We held weekly meetings to identify, implement, and troubleshoot specific efforts to promote the recruitment of participants from under-represented groups.

Participants were required to be 18 years of age or older, speak English and/or French fluently, and have access to a personal e-mail account. One member of the couple, a woman or gender-diverse individual who was assigned female at birth, was required to meet DSM-5-TR criteria for Female Sexual Interest/Arousal Disorder (American Psychiatric Association, 2022), determined during the screening process through a semi-structured clinical interview. To ensure opportunity for sexual activity and/or sexual rejection, couples were required to have a minimum four in-person contacts weekly in the prior month. Couples were ineligible to participate if they were undergoing treatment for sexual challenges or fertility treatment, actively trying to conceive, pregnant, breastfeeding, within one-year postpartum, or if one or both members self-reported a severe and untreated mental or physical illness.

## **Procedure**

This study was approved by the ethics review boards at Dalhousie University (REB # 2020-5207) and Université de Montréal (REB # CEREP-20-078-P). The eligibility of interested couples was assessed through a structured screening interview completed via telephone with one of our research team members. During screening, individuals with low desire who reported being gender-diverse (e.g., gender fluid, non-binary) and assigned female at birth were informed that the study was originally designed to focus on the experiences of women with low desire, and that they were welcome to participate, provided they would be comfortable with being grouped together with mostly women in our analyses. Participants were then invited to indicate whether



they would like to participate in the study. If a couple was deemed eligible following the initial screening call, and was interested in participating, the member experiencing low desire was invited to independently complete a 30- to 45-minute clinical interview via Zoom video conferencing or telephone. When the clinical interview was scheduled, the individual attending the interview was sent a consent form via Qualtrics Research Suite for both the clinical interview and participation in the study. During the semi-structured clinical interview, a research team member trained in assessing sexual difficulties confirmed that the individual's symptoms were in line with Female Sexual Interest/Arousal Disorder (per the DSM-5/DSM-5-TR criteria; American Psychiatric Association, 2022), and, if so, the couple was invited to enroll in the larger study. Following enrollment, couple members were sent individualized links to their baseline surveys through Qualtrics. Partners of women and gender-diverse individuals with SIAD provided their consent at the beginning of the baseline survey.

### *Daily*

Once both couple members completed the baseline survey, each couple was assigned a research team member as a contact person for the 56-day daily diary portion of the study. This team member provided a daily diary orientation phone call, enrolled the couple in the daily surveys, and conducted weekly check-ins via phone or email throughout the daily diary period. These retention strategies were adapted from Dillman's (2007) tailored method and the overall diary completion rate was 80%. During the diary period, participants received a link to their email each day at 5 p.m. in their respective time zone, which expired at 4 a.m. the following day. Couple members were instructed to complete the survey independently from their partner and prior to going to sleep to capture their experiences that day. A reminder link was sent nightly at 9 p.m. for individuals who had not yet completed the survey. The surveys required an estimated 8

to 15 minutes to complete. Compensation was pro-rated across the daily diary period, and each participant was eligible to receive up to \$120 CDN (or USD equivalent).

### ***Prospective***

Six months after receiving the baseline survey, participants received the 6-month survey, independently of when the baseline survey or daily diary period were completed, and participants did not need to complete the daily diaries to receive the 6-month survey. Participants' continued eligibility was confirmed at the beginning of the 6-month survey, with the exception of severe and untreated illness, which was only assessed during the initial screening. The baseline and 6-month surveys took approximately 40 to 60 minutes to complete and links for these surveys expired after four weeks. Participants received reminder telephone calls and emails to encourage completion. Following completion of the baseline and 6-month surveys, participants were compensated \$15 and \$18 CDN (or USD equivalent), respectively, via their preferred gift card or by e-transfer (available to participants with a Canadian bank account).

### **Measures**

Differences in daily and prospective measurements of predictor and outcome variables are presented within subheadings below. In the daily surveys, participants were asked to report on their experiences over the previous 24-hour period (or since their last diary), and in the baseline and 6-month surveys they were asked to reflect on their experiences over the past four weeks. All measures can be found on OSF: <https://doi.org/10.17605/OSF.IO/VXH58>.

### ***Demographics***

At baseline, participants reported their age, gender, sexual orientation, culture, years of education, and length of SIAD symptoms (reported by individuals with SIAD). Reports were averaged across both members for relationship status and length and combined annual income.

### ***Responses to Sexual Rejection***

Individuals with SIAD's perceived, and partners' reported, responses to sexual rejection were assessed at baseline and daily with adaptations of the Responses to Sexual Rejection Scale (RSRS; Kim et al., 2019). The RSRS assesses four types of responses to sexual rejection (i.e., understanding, resentful, insecure, and enticing). Higher scores for each response type indicate greater frequency of the response. We used two versions of the scale at both the daily and baseline timepoints: one measuring an individual's own responses to being sexually rejected (using items from the original measure), reported RSRS, and one version that included the same items adapted to be from the point of view of the rejector, perceived RSRS. Thus, scores for responses to sexual rejection for individuals with SIAD are based on the perceived RSRS, and partners' scores are from the reported RSRS.

**Daily.** Participants indicated whether sexual rejection occurred each day by responding to the following face-valid items: "Did your partner say or do something to indicate they were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?" and "Did you say or do something to indicate that you were NOT interested in having sex today (e.g., offer to cuddle instead, pretend to sleep, say no directly, express frustration)?" Participants indicated frequency on a scale *1 – Not at all* to *7 – A lot*, and responses were dichotomized into *1 – Yes* (i.e., equivalent to ratings of 2 to 7 on the initial, 7-point scale) and *2 – No* (i.e., equivalent to rating of 1 on the initial, 7-point scale).

Perceived and reported responses to sexual rejection were examined using two 4-item scales created based on the RSRS. Each item in the daily measure represented one of the four responses to sexual rejection. For example, the item representing the understanding responses scale included the following description: "One way that people can respond when their partner

expresses sexual disinterest is by being understanding and accepting, and letting their partner know they still love them and are attracted to them.” Participants who indicated they had been rejected by a partner that day (reported RSRS) were asked: “To what extent did you respond in this way when your partner expressed sexual disinterest today?”. Participants who indicated they had rejected a partner that day (perceived RSRS) were asked: “To what extent did your partner respond in this way when you expressed sexual disinterest today?” Participants reported the frequency of the behaviors described in each item on a scale of *1 – Not at all* to *7 – A lot*, such that the total score for each response type ranged from 1 to 7.

**Prospective.** Responses to sexual rejection were examined in the baseline survey using the original (i.e., reported RSRS for partners) and adapted (i.e., perceived RSRS for individuals with SIAD) versions of the 16-item RSRS, composed of four 4-item subscales, one for each of the four sexual rejection response types. Participants were instructed to “Please indicate how frequently you engage in the following ways when your partner declines you for sex.” (original version – reported RSRS) or “Please indicate how frequently your partner responds in the following ways when you decline them for sex.” (adapted version – perceived RSRS). Example items for each of the subscales include: understanding (original: “I let my partner know I still love them”, and adapted: “My partner lets me know they still love me”), resentful (“I ignore my partner” and “My partner ignores me”), insecure (“I think something is wrong in the relationship” and “My partner thinks there is something wrong in the relationship”), and enticing (“I ask if there is anything I can do to get my partner in the mood” and “My partner asks if there is anything they can do to get me in the mood”). Participants rated the frequency of each item on a scale of *1 – Never* to *5 – Very frequently*. The score for each response type was the average of the subscale’s four items. The RSRS subscales displayed acceptable to high internal reliability

(Taber, 2018): understanding (individuals with SIAD,  $\alpha = .72$ ; partners,  $\alpha = .61$ ), resentful ( $\alpha = .87$ ,  $\alpha = .76$ ), insecure ( $\alpha = .88$ ,  $\alpha = .86$ ), and enticing ( $\alpha = .79$ ,  $\alpha = .81$ ).

### ***Frequency of Sexual Rejection***

Frequency of sexual rejection was measured at baseline using face-valid items: “On average, how often do you decline your partner for sex? In other words, how often is your partner interested in sex, but you are not interested at that time?” and “On average, how often does your partner decline your sexual advances? In other words, how often are you interested in sex, but your partner is not interested at that time?”. Participants rated frequency on a scale of 1 – *Never* to 5 – *Daily*. Thus, each item’s total score ranges from 1 to 5.

In our daily and prospective post-hoc analyses, we controlled for both individuals with SIAD’s reported frequency of rejecting their partner and partners’ reported frequency of being rejected. Couple members’ reported frequencies of sexual rejection were moderately correlated ( $r(200) = .47, p < .01$ ).

### ***Non-Physical Sexual Coercion***

Non-physical sexual coercion was examined at baseline using two face-valid items adapted from the revised Conflicts Tactics Scale (CTS2; Straus et al., 1996). The CTS2 measures intimate partner violence, including coercive sexual behaviors in romantic relationships. Individuals with SIAD reported the frequency they received non-physical sexual coercion (i.e., “My partner insisted on sex when I did not want to (but did not use physical force)”) and partners reported on the frequency they enacted non-physical sexual coercion (i.e., “I insisted on sex when my partner did not want to (but did not use physical force)”). For both the daily and prospective measurements, participants’ responses were dichotomized according to an “ever prevalence” of the behavior (i.e., 1 – *The behavior has occurred at some point with their current*

*partner* and *0 – The behavior has never occurred*). The “ever prevalence” dichotomization is recommended due to heavily skewed results observed in the general population, with the majority of individuals indicating that they have never engaged in, or experienced, sexual coercion (Straus et al., 1996). Non-physical sexual coercion was weakly (daily) and moderately (prospective) correlated with enticing responses for both couple members.

**Daily.** On days of sexual activity, participants indicated how frequently non-physical sexually coercive behaviors had occurred that day. We created a dichotomous score based on whether non-physical sexual coercion was ever reported across the diary period.

**Prospective.** In the baseline survey, participants were asked to reflect on the lifetime prevalence of non-physical sexual coercion behaviors with their current partner.

### ***Sexual Satisfaction***

In the baseline, daily, and 6-month surveys, sexual satisfaction was measured using the 5-item Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995). The GMSEX items are measured on 7-point bipolar scales (e.g., from *1 – Very unpleasant* to *7 – Very pleasant*) and participants were asked to reflect on their sexual relationship with their partner. Total scores range from 5 to 35, with higher scores indicating higher sexual satisfaction. The GMSEX showed very high internal consistency (i.e., reliability of change; Bolger & Laurenceau, 2013) in our sample for individuals with SIAD and partners in the daily ( $R_C = .93$  and  $R_C = .94$ , respectively) and follow-up ( $\alpha = .93$  and  $\alpha = .93$ ) surveys.

### ***Dyadic Sexual Desire***

Dyadic sexual desire was assessed with items from the partner-focused subscale of the Sexual Desire Inventory-2 (SDI-2; Spector et al., 1996), with higher scores indicating higher desire for one’s partner.

**Daily.** Dyadic sexual desire was examined with a face-valid item from the SDI-2, “How much did you feel sexual desire for your partner today?”, rated on a scale of *1 – Not at all* to *7 – A lot*. Thus, total scores range from 1 to 7.

**Prospective.** In the baseline and 6-month surveys, seven partner-focused desire items from the SDI-2 were used to assess dyadic sexual desire. An example item is: “When you have sexual thoughts, how strong is your desire to engage in sexual behavior with a partner?”, rated on a scale of *0 – No desire* to *8 – Strong desire*. Total summed scores range from 0 to 54. These partner-focused items had high internal consistency for both individuals with SIAD ( $\alpha = .87$ ) and partners ( $\alpha = .89$ ).

### ***Sexual Distress***

Sexual distress was examined using adaptations of the Female Sexual Distress Scale-Revised (FSDS-R; Derogatis et al., 2008). Items were rated on a scale of *0 – Never* to *4 – Always* and higher summed scores indicated more concerns about one’s sex life.

**Daily.** The three-item Sexual Distress Scale (SDS-3; Lin et al., 2024) was used to assess daily sexual distress (i.e., “How often did you feel... (1) distressed about your sex life? (2) worried about sex? (3) sexually inadequate?”). Total scores range from 0 to 12. This measure has shown strong internal validity in samples across countries, gender identities, and sexual orientations (Lin et al., 2024). In the current study, items showed good consistency for individuals with SIAD ( $R_C = .87$ ) and partners ( $R_C = .76$ ).

**Prospective.** In the baseline and 6-month surveys, sexual distress was measured using the 5-item Sexual Distress Scale-Short Form (SDS-SF; Santos-Iglesias et al., 2020). An example item is: “How often did you feel stressed about sex?”. Total scores range from 0 to 20. The SDS-SF has demonstrated strong internal validity in samples of women and men (Santos-Iglesias et

al., 2020; Santos-Iglesias et al., 2018). Items displayed high internal reliability for individuals with SIAD ( $\alpha = .92$ ) and partners ( $\alpha = .88$ ).

### ***Relationship Satisfaction***

Relationship satisfaction was assessed using the 4-item Couples Satisfaction Index (CSI-4; Funk & Rogge, 2007) in the baseline, daily, and 6-month surveys. The CSI-4 includes items measuring positive and negative indicators of relationship quality (e.g., “Please indicate the degree of happiness, all things considered, of your relationship.” rated on a scale of 0 – *Extremely unhappy* to 6 – *Perfect*). Total scores range from 0 to 21, with higher scores indicating higher relationship satisfaction. The CSI showed high internal consistency when measured daily ( $R_C = .89$  for individuals with SIAD,  $R_C = .88$  for partners) and follow-up ( $\alpha = .95$  and  $\alpha = .94$ ).

### **Data Analysis**

Descriptive statistics and bivariate correlations were analyzed through *IBM SPSS Statistics* (Version 28). Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) and conducted in *Mplus* (Version 8). The women and gender-diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples, due to the clinical diagnosis. To reduce complexity, for both the daily and prospective analyses, a separate model was created for each type of partner response to sexual rejection (i.e., understanding, resentful, insecure, and enticing), examining its association with all outcome variables (i.e., sexual satisfaction, desire, distress, and relationship satisfaction). To explore the associations between enticing responses and our outcome variables, we included non-physical sexual coercion as a covariate in secondary models for the daily and prospective analyses. Thus, we had a total of five daily and five prospective models. The syntax and outputs for each model,



along with example model diagrams, are on OSF: <https://doi.org/10.17605/OSF.IO/VXH58>.<sup>2</sup>

### *Daily*

To examine the daily associations between each response to sexual rejection and the sexual and relationship outcome variables, we conducted residual dynamic structural equation modeling (RDSEM; Asparouhov et al., 2018). In RDSEM, concepts from time-series analyses, multilevel modeling, and structural equation modeling are integrated, along with estimating within-person autoregressive and cross-lagged regressions through residuals to account for the autocorrelation in residual errors (Asparouhov et al., 2018; McNeish & Hamaker, 2020). In RDSEM, two levels of variations are modelled: within-person (Level 1) and between-person (Level 2; McNeish & Hamaker, 2020). In line with our hypotheses, we tested the daily models at the within-person level, and we calculated correlations at the between-subject level to ensure model fit. Each of the four models included a Bayes estimator—a full-information estimator which uses all available data for modeling and is unbiased by missingness—and 5,000 Markov chain Monte Carlo iterations thinned to include every 10<sup>th</sup> iteration (Asparouhov & Muthén, 2010; Wang & Wang, 2019). We evaluated convergence using the Proportional Scale Reduction (PSR) value, with good convergence indicated by values equal to or close to one (Muthén, 2010). The models accounted for within-person stability through autoregression (i.e., regressing daily predictors and outcomes on the previous day's respective predictors and outcomes; Bolger & Laurenceau, 2013) and, to account for possible trends in the outcomes as a factor of time, we also regressed daily outcomes on time since beginning the diaries (McNeish & Hamaker, 2020). We did not model daily lagged changes due to insufficient consecutive days of data across couple members, and because this approach is more sensitive to missingness of consecutive days

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<sup>2</sup> Some participants opted out of having their de-identified data published on OSF. Consequently, interested individuals may contact the corresponding author to inquire about obtaining the de-identified dataset for this study.

of data compared to autoregressive modelling (Little & Rubin, 2002; Wickham & Knee, 2013). Latent mean centering is implemented in RDSEM to partition within- and between-subject variance among predictors, lagged predictors, and outcomes (Asparouhov & Muthén, 2019), and is considered a more accurate centering approach because it accounts for the Nickell's bias introduced in observed mean centering (Asparouhov et al., 2018).

Through our models, we assessed actor (i.e., the association between an individual's predictor and their own outcome) and partner (i.e., the association between an individual's predictor and their partner's outcome) effects. We examined whether day-to-day differences in an individual's reported predictor score compared to their own mean predictor score were associated with daily differences in their own and their partner's outcomes. We estimated covariances between the predictor variables of women and gender-diverse individuals with SIAD and men, women, and gender-diverse partners, and between their outcome variables (i.e., within-person effects).

### ***Prospective***

We used path models to assess the prospective associations between each response to sexual rejection at baseline and the sexual well-being and relationship satisfaction outcomes six months later. Each model included regressions of outcome variables six months later and at baseline on predictor variables, and regressions between outcome variables at six months and the same variables at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later regressed on their own and one another's sexual satisfaction at baseline). Correlations (e.g., within outcomes at baseline and six months later) were included for each model based on the Model Modification Indices reported by *Mplus*. The additive value of each correlation was determined by evaluating the model's fit using the acceptable thresholds of the

RMSEA ( $< 0.07$ ), CFI ( $> 0.95$ ), and TLI ( $> 0.95$ ) fit indices (Hooper et al., 2008). We added correlations until the model met or approached the aforementioned fit thresholds. Once acceptable model fit was determined, we completed bootstrapping for each model across 5,000 samples to obtain accurate standard errors. Estimates were standardized based on the variance of predictor, outcome, and latent variables (Kelloway, 2014). There was very little missingness in the baseline and 6-month data (average missingness across study variables: women and gender-diverse individuals with SIAD = 0.003%, men, women, and gender-diverse partners = 0.002%).

## **Results**

### **Descriptives**

Descriptive statistics for participants' demographic information can be found in Table 1. Overall, 232 couples were included across our daily and prospective analyses. Of the 232 couples, 138 couples were included in both analyses, 62 couples were included in the daily analyses only, and 32 couples were included in the prospective analyses only. The couples in the daily and prospective analyses did not significantly differ across any of the demographic variables examined, and as a result we calculated the demographic descriptives for the full sample ( $N = 232$ ). Descriptives for all variables in the daily and prospective analyses are in Table 2. Correlations for all variables, between couples and within individuals with SIAD and partners, at the daily level and over time are in Tables 3 and 4.

### **Daily and Prospective Associations**

The sample size recruited was powered for the larger study, thus, we used G\*Power (version 3.1; Faul et al., 2007) to conduct a sensitivity analysis (i.e., nEffective; Wiley & Wiley, 2019) to determine the effect sizes we would have the power to detect in our daily and prospective analyses. The sensitivity analysis considered the observed standard deviations of the

predictor and outcome variables and corrected the sample size for non-independence in the data (Wiley & Wiley, 2019). We determined that the smallest standardized effects we could detect were .12 (daily,  $N = 200$ ) and .17 (prospective,  $N = 170$ ) with 80% power and  $\alpha$  (two-sided) = .05. The results of the daily and prospective analyses can be found in Tables 5 and 6, respectively.

### ***Understanding Responses to Sexual Rejection***

**Daily.** In line with our hypothesis, on days when individuals with SIAD perceived, and partners reported, greater understanding responses compared to their average across all days, both they and their partners reported greater relationship satisfaction. On days when partners reported greater understanding responses, they also reported greater desire. Contrary to our expectations, when individuals with SIAD perceived greater understanding responses, they reported greater sexual distress, and on days when partners reported greater understanding responses, both they and their partners (individuals with SIAD) reported greater sexual distress. There were no significant daily effects of perceived or reported greater understanding responses on either couple member's sexual satisfaction or individuals with SIAD's sexual desire.

**Prospective.** When individuals with SIAD perceived greater understanding responses at baseline, they reported greater relationship satisfaction six months later. There were no significant prospective effects of individuals with SIAD's perceived greater understanding responses on their own sexual well-being or their partners' sexual well-being or relationship satisfaction. There were also no significant effects of partners' reported greater understanding responses at baseline on their own or individuals with SIAD's sexual well-being or relationship satisfaction six months later.

### ***Resentful Responses to Sexual Rejection***

**Daily.** Consistent with our predictions, on days when individuals with SIAD perceived, and their partners reported, greater resentful responses than usual, both they and their partners reported lower sexual and relationship satisfaction that day. When individuals with SIAD perceived greater resentful responses than usual, they reported greater sexual distress. On days when partners reported greater resentful responses than they typically did, they also reported greater sexual distress, and—contrary to our hypotheses—greater sexual desire. We did not find any significant daily effects of greater resentful responses on individuals with SIAD’s sexual desire.

**Prospective.** When individuals with SIAD perceived greater resentful responses at baseline, they reported lower sexual and relationship satisfaction six months later. We did not find any significant effects of greater resentful responses on individuals with SIAD’s sexual desire and distress, nor partners’ sexual well-being and relationship satisfaction.

### ***Insecure Responses to Sexual Rejection***

**Daily.** As hypothesized, compared to their respective averages across all days, on days when individuals with SIAD perceived, and partners reported, greater insecure responses, both they and their partners reported lower sexual and relationship satisfaction, and partners reported greater sexual distress. In addition, individuals with SIAD’s greater perceived insecure responses than usual were associated with their own lower sexual desire and greater sexual distress that day. Contrary to our predictions, on days when partners reported greater insecure responses, they reported greater sexual desire. There were no significant partner effects of insecure responses for either couple members’ sexual desire, or for individuals with SIAD’s sexual distress.

**Prospective.** When partners reported greater insecure responses at baseline, they also

reported lower sexual satisfaction and greater sexual distress six months later. Unexpectedly, when individuals with SIAD perceived greater insecure responses at baseline, their partners reported greater sexual satisfaction six months later. No significant actor or partner prospective effects were found for individuals with SIAD's own sexual well-being and relationship satisfaction, or partners' sexual desire and relationship satisfaction.

### ***Enticing Responses to Sexual Rejection***

**Daily.** On days when individuals with SIAD perceived, and partners reported, greater enticing responses than they typically did, they reported greater sexual desire and sexual distress that day (actor effects). On days when individuals with SIAD perceived greater enticing responses, their partners reported greater sexual desire. On days when partners reported greater enticing responses, individuals with SIAD reported lower sexual satisfaction. We did not find any significant daily effects of perceived or reported enticing responses on individuals with SIAD's and partners' relationship satisfaction, or partners' sexual satisfaction. After controlling for sexual coercion, we found the same significant effects as we had prior to including the covariate, with one exception: the association between individuals with SIAD's greater perceived enticing responses and their own reported greater sexual desire was no longer significant.

**Prospective.** When individuals with SIAD perceived greater enticing responses at baseline, they reported lower sexual satisfaction six months later, and this effect was maintained when controlling for sexual coercion. We did not find any additional significant effects between perceived or reported enticing responses at baseline and either couple members' sexual or relationship well-being outcomes six months later. However, a new, unexpected, significant effect emerged when controlling for sexual coercion. When partners reported greater enticing responses at baseline, individuals with SIAD reported greater sexual satisfaction six months

later. After including the sexual coercion covariate, there were no additional significant effects of perceived or reported enticing responses at baseline on either couple members' sexual well-being factors or relationship satisfaction.

### ***Controlling for Frequency of Sexual Rejection***

After including the frequency of sexual rejection as a covariate, we found no changes in the daily results. Longitudinally, one new significant effect emerged: individuals with SIAD who reported greater perceived insecure responses at baseline reported lower relationship satisfaction six months later. Additionally, one previously significant result became non-significant: after controlling for both frequency of sexual rejection and non-physical sexual coercion, individuals with SIAD who perceived greater enticing responses at baseline did not report significantly lower sexual satisfaction six months later.

## **Discussion**

This study assessed daily and prospective associations between partners' responses to sexual rejection (i.e., understanding, resentful, insecure, and enticing) and sexual well-being and relationship satisfaction in couples coping with SIAD. With some notable exceptions which are discussed throughout this section, our significant results generally aligned with our hypotheses: perceived and reported greater understanding responses, lower resentful responses, and lower insecure responses, were linked to greater sexual and relationship well-being outcomes. After controlling for non-physical coercion, greater perceived and reported enticing responses were associated with poorer sexual outcomes for individuals with SIAD at the daily level with mixed prospective outcomes, while the results were mixed for partners at the daily level and there were no significant prospective results. Additionally, after controlling for the frequency of sexual rejection, the daily results remained consistent, and there were two changes in the longitudinal

results.

From a broader perspective, several interesting patterns emerged in the data. At the daily level, all response types were positively associated with sexual distress for both couple members. Perceiving or reporting a higher frequency of any response type may indicate that sexual rejection—a significant source of sexual distress, as described qualitatively by both enactors and receivers in couples coping with low desire (Frost & Donovan, 2019)—occurred that day. For partners only, daily, all response types were positively associated with sexual desire for their partner. Given the correlational nature of these findings, it is possible that these results reflect a greater likelihood of initiating sexual activity on days when they experience higher partner-focused sexual desire than usual, and thus, the likelihood of rejection and any rejection responses was also higher on those days (Santos-Iglesias et al., 2013). Among the daily analyses, resentful and insecure responses showed the greatest number of significant associations. In line with our prior cross-sectional research (Schwenck et al., 2023), these results suggest that understanding and enticing responses may operate through more context-dependent mechanisms and involve additional moderating variables in their associations with couples' daily well-being. Comparing the two types of analyses, the daily data yielded five times more significant associations than the prospective data. Further, daily findings that aligned with our hypotheses generally exhibited medium to large effect sizes with narrower credible intervals, whereas the expected prospective results showed small to medium effect sizes with larger confidence intervals. These patterns suggest that responses to sexual rejection may have stronger implications for couples' same-day outcomes relative to their long-term outcomes.

Taken together, findings correspond with clinical and theoretical frameworks that conceptualize challenges with desire discrepancy at the dyadic level and emphasize the



importance of interpersonal factors—such as responses to sexual rejection—in navigating sexual difficulties (e.g., Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; van Anders et al., 2022).

### **Understanding Responses**

Consistent with our prior cross-sectional research (Schwenck et al., 2023), on days when individuals with SIAD perceived, and partners reported, greater understanding responses, they each reported greater relationship satisfaction that day—an effect that was maintained six months later for individuals with SIAD—and partners' reports were also associated with their own greater sexual desire. Similarly, prior research found that partners' greater positive and validating responses to women's low sexual desire/arousal were associated with both couple members' more positive views of their relationship (Rosen et al., 2020). Per the IERM (Rosen & Bergeron, 2019), understanding responses in the context of a sexual challenge may promote effective emotion regulation (e.g., acceptance, reappraisal) and buffer against daily interpersonal stressors—factors which have been linked to greater relationship satisfaction and sexual desire (Bodenmann et al., 2006; Dubé et al., 2019). Our results suggest that a partner's understanding responses to rejection predict longer-term relationship satisfaction in individuals with SIAD, supporting the directionality of our hypotheses. Coping with SIAD long-term provokes many negative emotions (e.g., guilt, sadness), particularly for women and gender-diverse individuals with distressing low desire, and can strain relationships (Frost & Donovan, 2019). Thus, perceiving a more understanding partner may be a protective factor in relationship maintenance for individuals with SIAD (Birnbaum, 2023).

Unexpectedly, for both individuals with SIAD and their partners, perceiving or reporting greater understanding responses was associated with greater sexual distress at the daily level, but these associations had smaller effects sizes than those of the other responses to sexual rejection

and sexual distress, and they were not significant over time. Prior daily diary research of partner responses to other types of sexual dysfunctions, such as genito-pelvic pain, determined that providing a lot of sympathy and support in response to the sexual difficulty was associated with poorer sexual outcomes for both couple members (e.g., Rosen et al., 2012; Rosen et al., 2013; Rosen et al., 2015). In SIAD, understanding responses may function similarly by reinforcing avoidance of sexual activity and/or sexual communication around SIAD, resulting in higher sexual distress that day. For partners, our results are similar to a previous cross-sectional study (Hogue et al., 2019), in which partners who reported being motivated to meet their partner's sexual needs at the expense of their own needs reported greater sexual distress. Yet, we did not see associations between greater understanding responses and greater sexual distress six months later. Clinically, the mixed results associated with understanding responses at the daily level indicate that attention should be paid to couples' needs, distress, and intent when engaging in these responses. Even so, our findings over time suggest that we may expect more long-term benefits than drawbacks of promoting understanding responses. Finally, there were no significant associations daily or over time between understanding responses and individuals with SIAD's sexual desire. Understanding responses may reduce pressure to engage in sexual activity to avoid a negative outcome (e.g., relationship conflict), while also not being inherently perceived as a sexual stimulus (Hogue et al., 2019; Toates, 2009).

### **Resentful and Insecure Responses**

As we expected, on days when individuals with SIAD perceived, and partners reported, greater resentful and insecure responses, they both reported lower sexual and relationship satisfaction that day, and partners also reported greater sexual distress. When individuals with SIAD perceived greater daily resentful and insecure responses than usual, they also reported

greater daily sexual distress, and lower sexual desire (for insecure responses, only) that day. Negative responses (e.g., critical, hostile, avoidant) to women's genito-pelvic pain during sexual activity have previously been linked to poorer sexual and relationship outcomes for both couple members in daily diary studies (e.g., Rosen et al., 2014; Rosen et al., 2015). Consistent with the IERM (Rosen & Bergeron, 2019), when partner responses to rejection are marked by resentment and insecurity, it may signal their own—and prompt their partner's—less effective emotion regulation (e.g., emotional outbursts, catastrophizing) and stronger negative emotions such as anger and anxiety, which are associated with couples' lower sexual well-being and relationship satisfaction, especially for women's sexual outcomes (Rosen & Bergeron, 2019; Scimeca et al., 2011; Van Minnen & Kampman, 2000).

Unexpectedly, on days when partners reported greater resentful and insecure responses than usual, they also reported greater sexual desire. It may be that on days when partners experienced greater sexual desire, they are more likely to become frustrated with their unmet sexual needs and/or are more sensitive to rejection, engage in less effective emotion regulation strategies, and feel more angry and resentful and/or hurt and insecure in response to rejection (Birnbaum, 2010; Rosen & Bergeron, 2019). It is also possible that partners who reported greater insecure responses to sexual rejection may report greater desire for partnered sexual activity that day because they are seeking assurance of their partner's love and commitment through sexual intimacy (Birnbaum, 2010).

Over time, the links between greater perceived resentful responses and lower sexual and relationship satisfaction persisted for individuals with SIAD, but not for their partners. Resentful sexual rejection responses have been linked to trait narcissism (Kim et al., 2019), and these results may reflect partners' beliefs of their own greater—and their partners' (individuals with

SIAD) lesser—entitlement to sexual pleasure, which has been linked to their partners’ poorer sexual and relational outcomes (Klein et al., 2024; McNulty & Widman, 2013). It is possible that for partners engaging in greater resentful responses, these links with narcissism and entitlement could buffer against long-term declines in sexual and relationship outcomes, for example, through greater self-enhancement (i.e., perceiving of oneself in a more favourable light than warranted; Grijalva & Zhang, 2016).

After controlling for frequency of sexual rejection, when individuals with SIAD perceived greater insecure responses at baseline, they reported lower relationship satisfaction, and their partners reported increased sexual satisfaction six months later. However, in contrast to the latter result, partners’ reported greater insecure responses at baseline predicted their own increased sexual distress and lower sexual satisfaction six months later. Partners’ insecure responses may be indicative of an insecure attachment style, which has been linked to couples’ greater sexual and relationship dissatisfaction and poorer sexual functioning due to factors such as hypersensitivity to rejection, or poorer abilities to communicate their sexual needs (Brassard et al., 2012; Dang et al., 2018; Davis et al., 2006; Valdez et al., 2021). Yet, our contrasting findings suggest that when individuals with SIAD perceived their partners’ trait levels of insecurity in response to rejection, they may have engaged in more relationship-promoting behaviors (e.g., affection, reassurance, gratitude) over time to reduce partners’ feelings of insecurity, which promoted partners’ sexual satisfaction (Davis et al., 2006; Overall et al., 2022).

### **Enticing Responses**

After controlling for non-physical sexual coercion, on days when women and gender-diverse individuals with SIAD perceived, and men, women, and gender-diverse partners reported, greater enticing responses, they reported greater sexual distress (actor effects), and

partners reported greater sexual desire. Partners' greater daily enticing responses were also associated with individuals with SIAD's lower sexual satisfaction. These results may indicate that on days when partners are experiencing higher desire, they are more likely to persist with initiating, and the probable repeated rejection following these attempts to re-initiate is linked to greater sexual distress for both couple members (Hendrickx et al., 2019). These interactions may be experienced as a partner's unresponsiveness to the individual with SIAD's sexual needs, resulting in their poorer sexual satisfaction (Hogue et al., 2019). Moreover, it is possible that the original actor effect of individuals with SIAD's greater sexual desire reflected individuals who, in response to insistent or pressuring verbal initiation attempts, felt they had to engage in sexual activity to meet a partner's needs, improve relationship dynamics, or avoid unwanted consequences (O'Sullivan, 2005). These potential consequences were not present, or became less salient, when a partner's attempts to re-initiate were not experienced as sexually coercive.

Over time, when individuals with SIAD perceived greater enticing responses at baseline, they reported a decrease in sexual satisfaction six months later. However, after controlling for both non-physical sexual coercion and frequency of sexual rejection, this effect was no longer significant and a second, seemingly contradictory effect emerged: when partners reported greater enticing responses, individuals with SIAD reported greater sexual satisfaction. A potential explanation is that individuals with SIAD who perceived more enticing responses at baseline may have been more distressed (e.g., guilty, frustrated) due to frequent rejection interactions, and thus, may be primed to interpret neutral interactions as a partner's attempts to initiate sexual activity and, as a result, persistent partner unresponsiveness (Brassard et al., 2012; Carrère et al., 2000; Hogue et al., 2019). However, when partners reported greater enticing responses, these intentional, non-coercive interactions may have made the individuals with SIAD feel sexually

desirable and, consequently, enhanced their sexual satisfaction, independent of sexual rejection frequency (Frederick et al., 2017; Metz & McCarthy, 2007). Finally, there were no significant daily or prospective effects of enticing responses for either partners' relationship satisfaction. It may be that enticing responses primarily relate to sexual needs—as opposed to the emotional and relational needs theoretically associated with understanding responses—and are inherently perceived as a sexual stimulus (Hogue et al., 2019; Toates, 2009).

### **Strengths, Limitations, and Future Research**

This study was the first to examine the daily and longer-term implications of partners' responses to sexual rejection for both couple members' sexual well-being and relationship satisfaction in couples coping with SIAD. Although sexual rejection occurs frequently, is highly distressing for couples coping with SIAD, and has detrimental effects for their well-being, it has rarely been a focus of research (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021; Schwenck et al., 2023). By dyadically exploring the implications of partners' responses, our findings support a transition away from attributing the burden of SIAD to women and gender-diverse individuals with SIAD, favoring instead an approach that focuses on addressing dynamics within the relationship (Dewitte, 2014; Girard & Woolley, 2017; Prekatsounaki et al., 2022; van Anders et al., 2022). Our methods offered a comprehensive understanding of these associations, with the daily diaries capturing within-person variability while limiting recall bias, and our prospective results building upon these correlational findings by allowing us to draw more temporal conclusions.

While our study sample included data from couples with non-majoritized identities, most individuals with SIAD were women (96.6%), most partners were men (87.1%), and most participants were heterosexual (74.1%), Euroamerican (81.6%), and had a high combined annual

income (i.e., >\$80,000; 56.9%), thus limiting the generalizability of our results. Further, as existing theories and prior research in sexuality and intimate relationships are often grounded in traditional binary gender models or heterosexual relationships, the generalizability of these theories to diverse populations requires ongoing reflection and caution. Indeed, there may be sociocultural dynamics surrounding sexual rejection and responses to sexual rejection that this study does not have sufficient data to address. Specifically, future research could benefit from exploring how individuals' alignment with societal expectations around relationship and sexual norms—across gender identities and sexual orientations—affects their response to sexual rejection and its outcomes. Within the daily diaries, questions exploring sexual rejection responses were branched from an initial question determining if sexual rejection occurred that day. Research in daily diary methods suggests that participants may indicate that an activity did not occur—although it did—to avoid follow-up questions and reduce burden (Gochmann et al., 2022). Thus, our results may not reflect all occurrences of sexual rejection experienced by participants in the daily diary sample. Moreover, the measure of responses to sexual rejection was developed in community samples (Kim et al., 2019), and there may be additional responses to sexual rejection that are more common in couples coping with SIAD and should be examined in future research (e.g., distraction; Sheppes et al., 2011). In our prospective analyses, we measured whether non-physical sexual coercion had ever occurred within the relationship at baseline. However, it is possible that, for some couples, this behavior may have first occurred between the baseline survey and the 6-month follow-up survey, and such instances were not captured in our analyses. To further elucidate the role of enticing responses, future research may benefit from examining the intent and emotional tone of enticing behaviours. Finally, while the present study focused on sexual rejection responses within couples with SIAD, future research

could extend these findings by examining how the ways in which couples initiate sexual activity may interact with sexual rejection behaviors and responses to sexual rejection. This could include examining the mechanisms underlying these associations, such as the role of emotion regulation proposed by the IERM (Rosen & Bergeron, 2019). Understanding these dynamics could provide insight into the broader sexual relationship, offering a more comprehensive picture of how couples negotiate sexual desire and interest over time. This approach could build on previous work (e.g., Kim et al., 2020; Pawłowska et al., 2024; Schwenck et al., 2023), by identifying patterns specific to couples affected by SIAD, as well as comparing these dynamics to those in couples without sexual desire challenges.

### **Conclusion**

Our study examined the daily and prospective associations of four distinct partner responses to sexual rejection and the sexual well-being and relationship satisfaction of women and gender-diverse individuals with SIAD and their men, women, and gender-diverse partners. Responses to sexual rejection may provide an opportunity for clinicians to engage partners of individuals with low desire in treatment, while cultivating partners' self-efficacy in the context of sexual challenges (Girard & Woolley, 2017). Therapeutic interventions may include psychoeducation regarding the daily and long-term implications of responses to sexual rejection. Clinicians are encouraged to collaborate with couples to explore how partners may engage in responses that result in favourable outcomes while respecting their own sexual needs—noting that preferred response styles may differ across couples, and between couple members. For example, clinicians might assess and discourage resentful responses, cultivate understanding responses—while discussing potential avoidance and negative cognitive appraisals that may co-occur—and explore any feasible long-term benefits of effectively communicating one's



insecurities to a partner (i.e., insecure responses) or attempting to reinitiate sexual activity (i.e., enticing responses) following sexual rejection. Overall, our findings indicate that responses to sexual rejection may be a novel target for therapeutic intervention.

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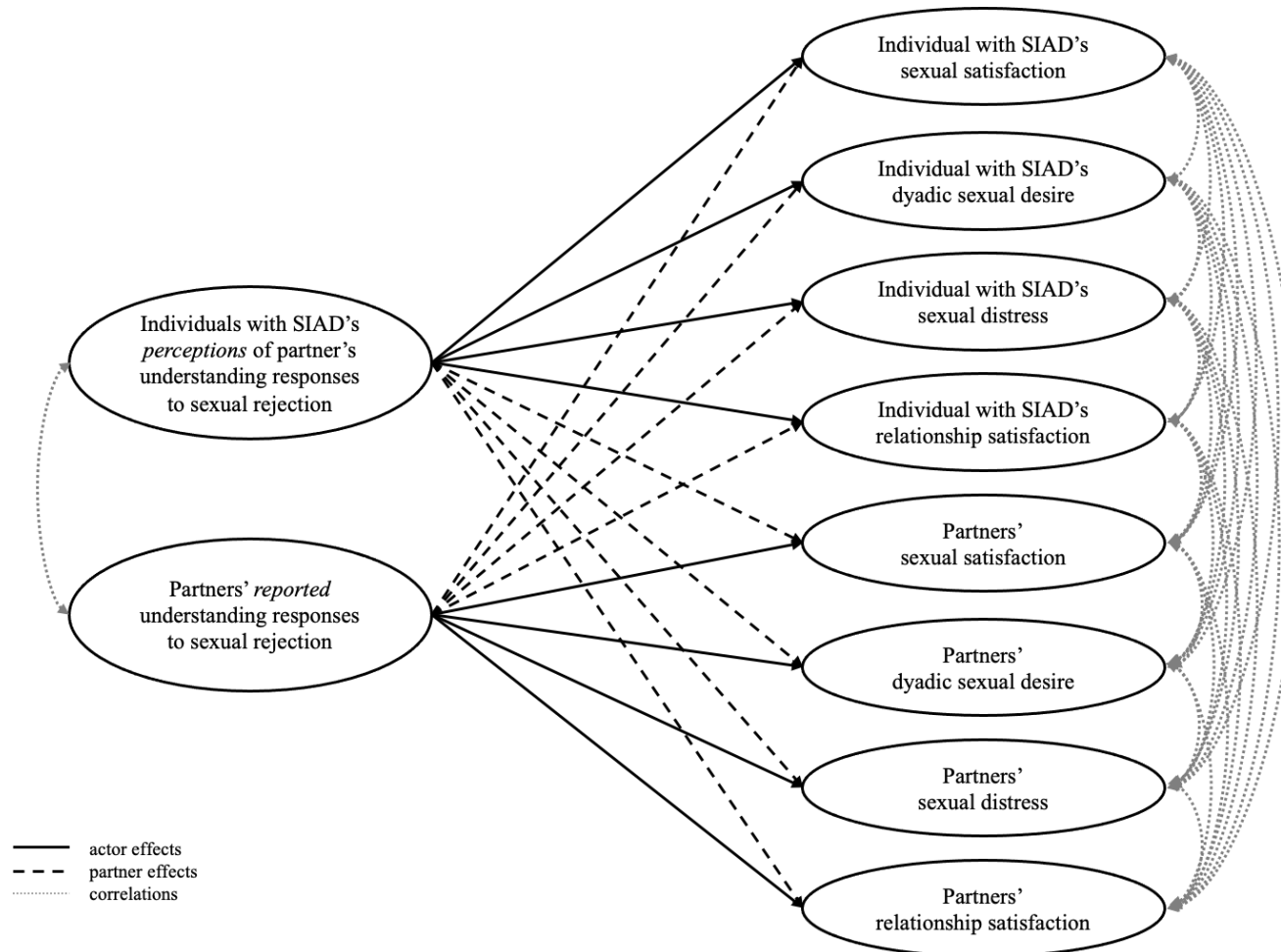
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## Figure 1

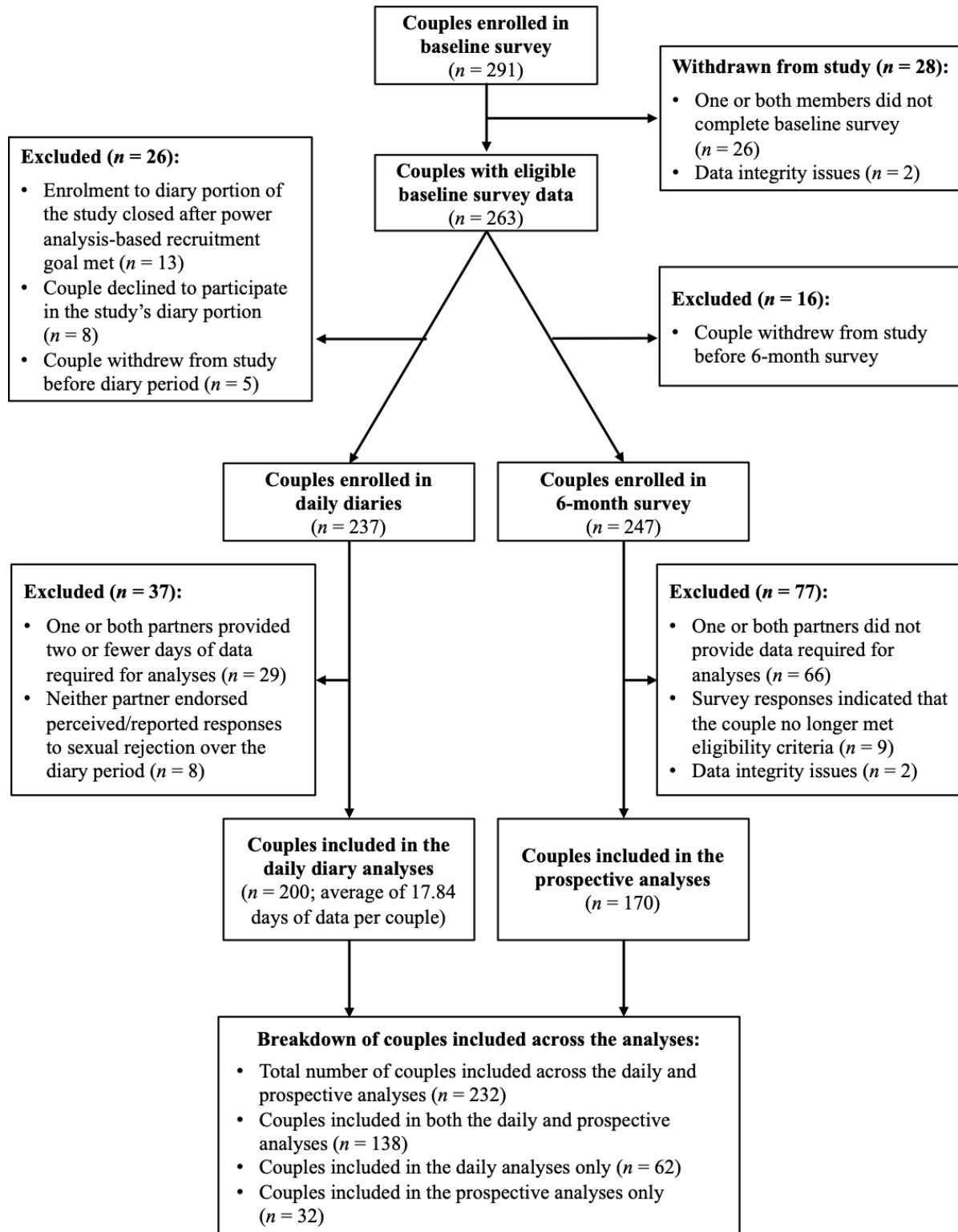
Conceptual diagram of actor and partner effects referred to in the hypotheses



*Note.* This is an example diagram displaying the actor and partner effects referred to in the hypotheses, using understanding responses as an example. These effects were examined for each of the four responses to sexual rejection daily and prospectively. For more comprehensive example diagrams of the daily and prospective analyses conducted, see Supplemental Materials on OSF: <https://doi.org/10.17605/OSF.IO/VXH58>.

**Figure 2**

*Flow of participant inclusion to daily ( $N = 200$ ) and prospective ( $N = 170$ ) analyses*



**Table 1**

*Descriptive statistics ( $M \pm SD$  or  $N$  [%]) of the cumulative sample's ( $N = 232$ ) demographic variables*

	Women and gender diverse individuals with SIAD	Men, women, and gender diverse partners
Age (years)	34.67 $\pm$ 9.98	36.13 $\pm$ 10.51
Gender		
Woman	224 (96.6%)	22 (9.5%)
Man	–	202 (87.1%)
Indigenous (e.g., Two-Spirit)	2 (0.8%)	–
Non-binary	10 (4.3%)	7 (3.0%)
Additional†	4 (1.7%)	3 (1.3%)
Sexual Orientation		
Asexual	4 (1.7%)	–
Bisexual	31 (13.4%)	13 (5.6%)
Gay	–	2 (0.9%)
Heterosexual	157 (67.7%)	187 (80.6%)
Lesbian	10 (4.3%)	15 (6.5%)
Pansexual	13 (5.6%)	5 (2.2%)
Queer	12 (5.2%)	6 (2.6%)
Questioning	3 (1.3%)	3 (1.3%)
Additional†	2 (0.9%)	2 (0.9%)
Culture		
African	2 (0.9%)	–
American	7 (3.0%)	4 (1.7%)
Biracial/Multiracial	5 (2.2%)	6 (2.6%)
Black/African American	2 (0.9%)	7 (3.0%)
East Asian	5 (2.2%)	4 (1.7%)
English Canadian	96 (41.4%)	95 (40.9%)
European	27 (11.6%)	24 (10.3%)
Hispanic	–	3 (1.3%)
Indigenous	5 (2.2%)	5 (2.2%)
Latin American/Latino/a/x	5 (2.2%)	7 (3.0%)
Middle Eastern/Central Asian	3 (1.3%)	3 (1.3%)
Québécois/French Canadian	111 (47.8%)	98 (42.2%)
South Asian	–	5 (2.2%)
Southeast Asian	2 (0.9%)	3 (1.3%)
White	65 (28.0%)	69 (29.7%)
Additional cultures‡	7 (3.0%)	6 (2.6%)
Education (years)§	16.15 $\pm$ 3.02	15.12 $\pm$ 3.21
Length of SIAD (years)	7.12 $\pm$ 7.76	–
Relationship Status		
Cohabiting		131 (56.5%)
Married		88 (37.9%)
Not cohabiting		13 (5.6%)
Relationship Length (years)		9.32 $\pm$ 7.74

Combined Annual Income

\$0-\$39,999	35 (15.1%)
\$40,000-\$79,999	65 (28.0%)
\$80,000-\$119,999	70 (30.2%)
>\$120,000	62 (26.7%)

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*Note.* Participants could select multiple genders, sexual orientations, and cultures, thus, percentages of participants endorsing each response may not add up to 100%. In order to protect confidentiality, cells containing only one participant are not reported on in this table (these individuals are instead reflected in the additional gender, sexual orientation, or culture categories).

†The additional option provided was an open-ended response.

‡Additional options provided for culture included: Australian, Native Hawaiian/Other Pacific Islander, and an open-ended response.

§Starting from first grade.



**Table 2***Study variables' descriptive statistics (M ± SD or N [%])*

	Daily (N = 200)		Prospective (N = 170)	
	Women and gender diverse individuals with SIAD	Men, women, and gender diverse partners	Women and gender diverse individuals with SIAD	Men, women, and gender diverse partners
<b>Predictors</b>				
Understanding responses	2.61 ± 1.26	2.80 ± 1.25	3.79 ± 0.84 <sub>e</sub>	3.92 ± 0.61 <sub>e</sub>
Resentful responses	1.36 ± 0.55	1.35 ± 0.61	1.60 ± 0.77	1.67 ± 0.62
Insecure responses	1.51 ± 0.67 <sub>a*</sub>	1.75 ± 0.92 <sub>a*</sub>	2.61 ± 1.06	2.71 ± 0.97
Enticing responses	1.72 ± 0.76	1.62 ± 0.78	2.65 ± 0.95	2.66 ± 0.89
<b>Covariate</b>				
Sexual coercion†	61 (30.5%) <sub>b</sub>	46 (23.0%) <sub>b</sub>	65 (38.2%)	52 (30.6%)
Sexual rejection frequency§	–	–	3.42 ± 1.00	3.60 ± 1.08
<b>Outcomes</b>				
Sexual satisfaction	19.85 ± 5.43	20.43 ± 6.01	21.04 ± 7.07 <sub>f</sub>	22.43 ± 7.59 <sub>f</sub>
Sexual desire	1.81 ± 0.76 <sub>c*</sub>	4.09 ± 1.36 <sub>c*</sub>	16.35 ± 9.53 <sub>g*</sub>	35.14 ± 10.21 <sub>g*</sub>
Sexual distress	3.91 ± 2.59 <sub>d*</sub>	2.49 ± 2.36 <sub>d*</sub>	9.90 ± 4.97 <sub>h*</sub>	6.70 ± 4.63 <sub>h*</sub>
Relationship satisfaction	12.96 ± 3.53	13.27 ± 3.53	13.44 ± 4.65	13.51 ± 4.57

*Note.* Statistics with the same subscript letter indicate a significant difference ( $p < .05$ ) in scores between individuals with SIAD and partners. Subscript letters with \* indicate significance of  $p < 0.001$ .

†Participants who reported receiving (individuals with SIAD) or enacting (partners) non-physical sexual coercion.

§Reported average frequency of rejection behaviours enacted individuals with SIAD and received by partners (measured at baseline).

**Table 3**

*Correlations within and between couple members of individuals' daily reports of predictor, covariate, and outcome variables (n = 3568 days)*

	1	2	3	4	5	6	7	8	9	10
1. Understanding responses	<b>-0.12**</b>	0.01	0.11**	0.34**	-0.10**	0.07**	0.05**	0.09**	0.04*	0.20**
2. Resentful responses	0.11**	<b>0.11**</b>	0.65**	0.27**	0.17**	0.07**	-0.12**	0.00	0.19**	-0.24**
3. Insecure responses	0.30**	0.51**	<b>0.4*</b>	0.35**	0.14**	0.08**	-0.15**	-0.03	0.23**	-0.21**
4. Enticing responses	0.32**	0.48**	0.43**	<b>0.18**</b>	0.14**	0.16**	-0.03*	0.07**	0.14**	0.01
5. Non-physical sexual coercion	0.00	0.11**	0.09**	0.20**	<b>0.34**</b>	0.17**	0.13**	-0.02	0.00	-0.14**
6. Sexual rejection frequency <sup>§</sup>	0.05**	-0.07**	-0.03	0.02	0.05**	<b>0.47**</b>	0.00	-0.02	0.10**	0.07**
7. Sexual satisfaction	0.10**	-0.05**	-0.12**	0.01	0.08**	-0.19**	<b>0.21**</b>	0.35**	-0.25**	0.43**
8. Sexual desire for partner	0.22**	0.04*	0.07**	0.18**	-0.01	0.12**	0.10**	<b>0.14**</b>	0.02	0.26**
9. Sexual distress	0.01	0.27**	0.31**	0.22**	0.08**	0.04*	-0.36**	0.10**	<b>0.36**</b>	0.03
10. Relationship satisfaction	0.14**	-0.09**	-0.17**	0.01	-0.05**	-0.09**	-0.31**	0.28**	0.58**	<b>0.54**</b>

*Note:* Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are bolded on the diagonal.

Rejection responses represent behaviours perceived by individuals with SIAD and reported by partners. Non-physical sexual coercion represents behaviours received by individuals with SIAD and enacted by partners. Sexual rejection frequency represents frequency of rejection behaviours enacted by individuals with SIAD and received by partners.

<sup>§</sup>Data collected at baseline ( $N = 200$ ).

\*\*  $p < .01$ ; \*  $p < .05$ .

**Table 4**

*Correlations within and between couple members' predictor and covariate (measured at baseline) and outcome (measured at 6 months) variables (N = 170)*

	1	2	3	4	5	6	7	8	9	10
1. Understanding responses	<b>0.35**</b>	-0.64**	-0.50**	-0.20*	-0.16*	-0.04	0.18*	-0.06	-0.07	0.37**
2. Resentful responses	-0.49**	<b>0.51**</b>	0.61**	0.31**	0.25*	0.15*	-0.19*	-0.05	0.04	-0.43**
3. Insecure responses	-0.31**	0.60**	<b>0.55**</b>	0.34**	0.21*	0.27**	-0.14	-0.11	0.18*	-0.27**
4. Enticing responses	0.02	0.37**	0.25**	<b>0.54*</b>	0.39**	0.39**	-0.06	0.04	0.11	-0.18*
5. Non-physical sexual coercion	-0.18*	0.26**	0.19*	0.33**	<b>0.21**</b>	0.15*	-0.11	-0.11	-0.11	-0.14
6. Sexual rejection frequency	0.02	0.21**	0.36**	0.37**	0.21**	<b>0.47**</b>	-0.03	-0.10	0.24**	0.01
7. Sexual satisfaction	0.20*	-0.20*	-0.35**	0.07	-0.01	-0.11	<b>0.45**</b>	0.27**	-0.23**	0.50**
8. Sexual desire for partner	0.12	0.08	0.16*	0.29**	0.17*	0.43**	0.20**	<b>0.17*</b>	0.02	0.02
9. Sexual distress	-0.04	0.21**	0.43**	0.01	0.04	0.13	-0.51**	0.03	<b>0.24**</b>	-0.09
10. Relationship satisfaction	0.35**	-0.37**	-0.41**	-0.07	-0.15*	-0.09	0.51**	0.09	-0.39**	<b>0.58**</b>

*Note:* Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are bolded on the diagonal.

Rejection responses represent behaviours perceived by individuals with SIAD and reported by partners. Non-physical sexual coercion represents behaviours received by individuals with SIAD and enacted by partners. Sexual rejection frequency represents frequency of rejection behaviours enacted by individuals with SIAD and received by partners.

\*\*  $p < .01$ ; \*  $p < .05$ .

**Table 5.***Daily within-person effects of responses to sexual rejection and sexual well-being and relationship satisfaction (N = 200 couples)*

	1 – Sexual satisfaction			2 – Sexual satisfaction			1 – Dyadic sexual desire			2 – Dyadic sexual desire		
	B	SD	95% CI	B	SD	95% CI	B	SD	95% CI	B	SD	95% CI
<b>1 – Perceived responses</b>												
Understanding	0.06	0.04	-0.02, 0.15	-0.04	0.08	-0.19, 0.11	0.02	0.01	-0.01, 0.04	-0.01	0.02	-0.05, 0.04
Resentful	<b>-0.70*</b>	<b>0.08</b>	<b>-0.82, -0.49</b>	<b>-0.72*</b>	<b>0.15</b>	<b>-1.01, -0.43</b>	-0.02	0.02	-0.06, 0.02	-0.06	0.05	-0.15, 0.02
Insecure	<b>-0.53*</b>	<b>0.07</b>	<b>-0.64, -0.35</b>	<b>-0.81*</b>	<b>0.14</b>	<b>-1.08, -0.54</b>	<b>-0.06*</b>	<b>0.02</b>	<b>-0.09, -0.02</b>	-0.08	0.04	-0.16, 0.01
Enticing	-0.02	0.06	-0.11, 0.12	-0.02	0.12	-0.24, 0.21	<b>0.03*</b>	<b>0.02</b>	<b>0.01, 0.06</b>	<b>0.10*</b>	<b>0.03</b>	<b>0.03, 0.16</b>
Enticing - non-physical sexual coercion covariate	-0.02	0.11	-0.24, 0.20	0.02	0.12	-0.22, 0.26	0.04	0.08	-0.12, 0.20	<b>0.10*</b>	<b>0.04</b>	<b>0.03, 0.17</b>
<b>2 – Reported responses</b>												
Understanding	-0.01	0.07	-0.13, 0.13	0.08	0.05	-0.02, 0.16	-0.01	0.02	-0.04, 0.03	<b>0.13*</b>	<b>0.01</b>	<b>0.10, 0.16</b>
Resentful	<b>-0.65*</b>	<b>0.16</b>	<b>-0.95, -0.34</b>	<b>-0.35*</b>	<b>0.09</b>	<b>-0.82, -0.49</b>	0.03	0.04	-0.05, 0.10	<b>0.08*</b>	<b>0.03</b>	<b>0.03, 0.14</b>
Insecure	<b>-0.45*</b>	<b>0.11</b>	<b>-0.66, -0.25</b>	<b>-0.43*</b>	<b>0.07</b>	<b>-0.55, -0.30</b>	-0.03	0.03	-0.08, 0.02	<b>0.09*</b>	<b>0.02</b>	<b>0.05, 0.14</b>
Enticing	<b>-0.38*</b>	<b>0.11</b>	<b>-0.60, -0.17</b>	0.05	0.07	-0.07, 0.20	0.03	0.03	-0.03, 0.08	<b>0.21*</b>	<b>0.02</b>	<b>0.17, 0.25</b>
Enticing - non-physical sexual coercion covariate	<b>-0.41*</b>	<b>0.12</b>	<b>-0.63, -0.17</b>	0.05	0.13	-0.20, 0.29	0.02	0.03	-0.04, 0.08	<b>0.26*</b>	<b>0.09</b>	<b>0.09, 0.44</b>
	1 – Sexual distress			2 – Sexual distress			1 – Relationship satisfaction			2 – Relationship satisfaction		
	B	SD	95% CI	B	SD	95% CI	B	SD	95% CI	B	SD	95% CI
<b>1 – Perceived responses</b>												
Understanding	<b>0.13*</b>	<b>0.02</b>	<b>0.09, 0.17</b>	-0.02	0.03	-0.07, 0.03	<b>0.20*</b>	<b>0.03</b>	<b>0.14, 0.27</b>	<b>0.11*</b>	<b>0.05</b>	<b>0.02, 0.20</b>
Resentful	<b>0.38*</b>	<b>0.04</b>	<b>0.31, 0.45</b>	<b>0.15*</b>	<b>0.05</b>	<b>0.05, 0.25</b>	<b>-0.66*</b>	<b>0.06</b>	<b>-0.78, -0.55</b>	<b>-0.51*</b>	<b>0.09</b>	<b>-0.69, -0.35</b>
Insecure	<b>0.42*</b>	<b>0.03</b>	<b>0.35, 0.48</b>	<b>0.23*</b>	<b>0.05</b>	<b>0.13, 0.32</b>	<b>-0.52*</b>	<b>0.05</b>	<b>-0.62, -0.42</b>	<b>-0.42*</b>	<b>0.08</b>	<b>-0.58, -0.27</b>
Enticing	<b>0.27*</b>	<b>0.03</b>	<b>0.21, 0.32</b>	0.01	0.04	-0.07, 0.08	-0.02	0.04	-0.11, 0.06	0.06	0.07	-0.07, 0.19
Enticing - non-physical sexual coercion covariate	<b>0.32*</b>	<b>0.09</b>	<b>0.14, 0.50</b>	0.02	0.04	-0.06, 0.10	0.04	0.10	-0.15, 0.23	0.09	0.07	-0.06, 0.23
<b>2 – Reported responses</b>												
Understanding	<b>0.07*</b>	<b>0.03</b>	<b>0.01, 0.14</b>	<b>0.04*</b>	<b>0.02</b>	<b>0.01, 0.07</b>	<b>0.10*</b>	<b>0.05</b>	<b>0.01, 0.19</b>	<b>0.15*</b>	<b>0.03</b>	<b>0.09, 0.20</b>
Resentful	0.03	0.08	-0.12, 0.19	<b>0.28*</b>	<b>0.03</b>	<b>0.22, 0.34</b>	<b>-0.57*</b>	<b>0.11</b>	<b>-0.78, -0.35</b>	<b>-0.42*</b>	<b>0.05</b>	<b>-0.51, -0.32</b>
Insecure	0.02	0.05	-0.09, 0.12	<b>0.26*</b>	<b>0.02</b>	<b>0.22, 0.31</b>	<b>-0.26*</b>	<b>0.08</b>	<b>-0.41, -0.11</b>	<b>-0.34*</b>	<b>0.04</b>	<b>-0.42, 0.26</b>
Enticing	0.03	0.06	-0.08, 0.14	<b>0.18*</b>	<b>0.03</b>	<b>0.14, 0.23</b>	-0.11	0.08	-0.27, 0.04	0.02	0.04	-0.07, 0.10
Enticing - non-physical sexual coercion covariate	-0.02	0.06	-0.14, 0.09	<b>0.24*</b>	<b>0.09</b>	<b>0.06, 0.42</b>	-0.11	0.09	-0.29, 0.06	0.05	0.11	-0.16, 0.26

Note. 1 represents women and gender diverse individuals with SIAD who *perceived* responses to sexual rejection, 2 represents men, women, and gender diverse partners of individuals with SIAD who *reported* responses to sexual rejection. Each response to sexual rejection was tested in a separate model (i.e., four models total for daily analyses) that included all the sexual well-being and relationship satisfaction outcomes.

\* and bolded font denote results significant at  $p < 0.05$

There were no changes in the significant daily results after controlling for frequency of sexual rejection.

B = unstandardized betas; SD = posterior standard deviation; CI = credible interval

**Table 6.***Prospective effects of responses to sexual rejection and sexual well-being and relationship satisfaction (N = 170 couples)*

	1 – Sexual satisfaction			2 – Sexual satisfaction			1 – Dyadic sexual desire			2 – Dyadic sexual desire		
	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI
<b>1 – Perceived responses</b>												
Understanding	0.10	0.07	-0.04, 0.24	-0.01	0.08	-0.15, 0.14	-0.10	0.06	-0.23, 0.02	0.04	0.05	-0.06, 0.13
Resentful	<b>-0.16*§</b>	<b>0.08</b>	<b>-0.32, -0.01</b>	-0.02	0.08	-0.18, 0.14	-0.01	0.07	-0.15, 0.13	-0.04	0.06	-0.15, 0.07
Insecure	-0.06	0.08	-0.21, 0.09	<b>0.18*§</b>	<b>0.08</b>	<b>0.02, 0.35</b>	-0.12	0.07	-0.25, 0.02	0.08	0.05	-0.03, 0.18
Enticing	<b>-0.17*§</b>	<b>0.09</b>	<b>-0.24, -0.01</b>	-0.04	0.10	-0.23, 0.15	-0.01	0.09	-0.18, 0.16	0.04	0.06	-0.07, 0.15
Enticing - non-physical sexual coercion covariate	<b>-0.18*</b>	<b>0.09</b>	<b>-0.35, -0.01</b>	-0.08	0.10	-0.27, 0.11	-0.01	0.10	-0.20, 0.19	0.06	0.06	-0.05, 0.18
<b>2 – Reported responses</b>												
Understanding	0.07	0.07	-0.07, 0.21	0.12	0.07	-0.03, 0.26	0.08	0.06	-0.05, 0.20	0.07	0.05	-0.03, 0.16
Resentful	0.06	0.08	-0.01, 0.22	-0.10	0.08	-0.26, 0.06	0.01	0.07	-0.14, 0.15	-0.03	0.06	-0.14, 0.08
Insecure	-0.09	0.08	-0.23, 0.06	<b>-0.35*§</b>	<b>0.09</b>	<b>-0.52, -0.17</b>	0.06	0.07	-0.08, 0.21	-0.09	0.05	-0.20, 0.01
Enticing	0.13	0.08	-0.03, 0.30	0.08	0.09	-0.10, 0.26	0.13	0.09	-0.05, 0.31	-0.02	0.06	-0.15, 0.10
Enticing - non-physical sexual coercion covariate	<b>0.20*§</b>	<b>0.09</b>	<b>0.03, 0.36</b>	0.10	0.10	-0.09, 0.28	0.17	0.09	-0.01, 0.35	-0.03	0.07	-0.16, 0.10
	1 – Sexual distress			2 – Sexual distress			1 – Relationship satisfaction			2 – Relationship satisfaction		
	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI	<i>Est</i>	SE	95% CI
<b>1 – Perceived responses</b>												
Understanding	-0.09	0.07	-0.22, 0.05	0.05	0.07	-0.08, 0.18	<b>0.13*§</b>	<b>0.06</b>	<b>0.01, 0.25</b>	0.02	0.07	-0.11, 0.15
Resentful	0.04	0.08	-0.11, 0.19	-0.07	0.07	-0.21, 0.07	<b>-0.17*§</b>	<b>0.07</b>	<b>-0.30, -0.04</b>	-0.06	0.07	-0.19, 0.07
Insecure	0.08	0.07	-0.07, 0.22	-0.11	0.08	-0.27, 0.05	-0.13§	0.07	-0.26, 0.01	0.01	0.07	-0.12, 0.13
Enticing	0.10	0.08	-0.06, 0.26	0.01	0.08	-0.14, 0.15	-0.09	0.08	-0.24, 0.05	0.01	0.07	-0.13, 0.14
Enticing - non-physical sexual coercion covariate	0.17	0.09	-0.01, 0.34	0.02	0.08	-0.14, 0.18	-0.09	0.08	-0.24, 0.06	0.02	0.07	-0.12, 0.16
<b>2 – Reported responses</b>												
Understanding	0.01	0.07	-0.13, 0.15	0.05	0.07	-0.07, 0.18	0.03	0.06	-0.09, 0.15	0.10	0.06	-0.02, 0.23
Resentful	-0.12	0.08	-0.27, 0.04	0.06	0.07	-0.09, 0.21	0.08	0.07	-0.05, 0.20	-0.05	0.07	-0.18, 0.09
Insecure	-0.06	0.08	-0.23, 0.10	<b>0.21*§</b>	<b>0.09</b>	<b>0.05, 0.38</b>	0.10	0.08	-0.05, 0.24	-0.08	0.07	-0.23, 0.06
Enticing	-0.11	0.09	-0.28, 0.06	-0.06	0.07	-0.21, 0.08	0.01	0.07	-0.12, 0.14	0.01	0.07	-0.12, 0.14
Enticing - non-physical sexual coercion covariate	-0.13	0.09	-0.31, 0.04	-0.07	0.08	-0.22, 0.09	0.01	0.07	-0.11, 0.14	0.03	0.07	-0.10, -0.17

*Note.* 1 represents women and gender diverse individuals with SIAD who *perceived* responses to sexual rejection, 2 represents men, women, and gender diverse partners of individuals with SIAD who *reported* responses to sexual rejection. Each response to sexual rejection was tested in a separate model (i.e., four models total for prospective analyses) that included all the sexual well-being and relationship satisfaction outcomes.

\* and bolded font denote results significant at  $p < 0.05$  before controlling for frequency of sexual rejection

§ denotes results significant at  $p < 0.05$  after controlling for frequency of sexual rejection

*Est* = standardized model estimate; SE = standard error; CI = confidence interval