

How Does Social Isolation Affect Our Sex Lives?

Authors: Bronwyn MacLeod* and Isaac Kool

Supervising Instructor & Assistant: Michael Pollock and Kristina Andrew, Psyc 110
("Experimental Psychology")

Department of Psychology, Camosun College, 3100 Foul Bay Road, Victoria, BC, Canada V8P 5J2

*Corresponding author email: bronmacleod@gmail.com

ABSTRACT

In this paper, we sought to understand the short- and long-term consequences of social isolation on peoples' sex drives and sexual relationships. Previous research has predicted the effects of isolation through variables such as sexual desire, sexual activity, depending on the amount of psychological stimulation. In our correlational study, we tested the strength of these relationships by examining naturalistic daily changes in their variables longitudinally over a two-week period. These included feelings of isolation, psychological stimulation, and sexual desire measured by hourly subjective ratings, duration of isolation measured by total time each day, and sexual activity measured by frequency of activity each day. Data pooled across our participants showed no strong correlations of sexual activity with duration of isolation or psychological stimulation. There was also no correlation between feelings of isolation and sexual desire.

1. Introduction

1.1 Research Problem

Sex and sexuality are deeply important facets of the human experience and, amid severe social isolation, people may experience a loss of sexual autonomy. This change can have repercussions on sexual health, both immediate and long term. The global crisis of Covid-19 has forced humans to abstain from desires for community and connection; however, the desire for sex has not fully ceased with the restrictions on our social lives. I am curious how people's relationship to sex is altered by isolation, and how needs can still be cared for in a safe and healthy manner. With an increase in the number of Covid-19 cases primarily

affecting people in their early 20s to 30s, this demographic will be forced to change the way they interact with their sexual desires - forcing people to consider pornography and online sexual experiences. Therefore, I wonder what the repercussions will be for our society. Through investigating the effects of social isolation on human relations, we hope to find solutions and resources to support sexual health, safety and well being, both in the midst of a crisis, and in the wake of its effects.

1.2 Literature Review

It has been found that there is a decrease in overall sexual desire during the social distancing protocol. A survey was conducted in China by Li et al. (2020); 600 men and

600 women were invited to complete an online questionnaire assessing their sexual behaviour before and during quarantine. The survey was available early in quarantine, between March 13th and 15th, 2020. The final analysis of the survey included 459 participants: 25% of which reported a decrease in sexual desire. It seems that this decrease in desire was a product of the social separation that people are experiencing.

It was also found that sexual activity increased with length of social isolation. A study conducted in the UK by Jacob et al. (2020) surveyed 932 individuals over the age of 18 and confirmed that they were currently self-isolating. 868 individuals were included in the final survey, with 39.9% reporting to have engaged in sexual activity at least once per week, thus categorizing them as sexually active. It was found that the longer that individuals spent in isolation, the more sexual activity they reported to have: 33.5% of people that were in isolation for 0-5 days were sexually active, whereas the number increased to 47% of individuals that were in isolation for more than 11 days. Jacob et al (2020) assert that sourcing safe and consensual ways to have sex could show a significant improvement in overall well being during periods of isolation and social distancing during the pandemic of Covid-19, given that a decrease in sexual activity along with social isolation has been previously linked to potentially detrimental health outcomes (particularly in relation to mental health).

In addition, the Covid-19 pandemic has brought to light that, with lockdowns and isolation, there has been a decrease in psychological stimulation leading to less sexual intercourse. Cito et al. (2020) created and distributed Google-based survey through social media platforms to study the sex lives of couples and individuals during

the height of Italy's lockdown, over a four week period starting in April 2020.

Throughout the pandemic, Cito et al. (2020) showcased that 40.9% of 1576 participants disclosed a decrease in psychological stimulation, with a correlation to less sexual intercourse. Given this decrease in psychological stimulation, it is unclear what the long-term repercussions will have on our sex lives and the amount of sex we have.

1.3 Hypotheses

Based on the above literature review, we predicted the following hypotheses:

- Hypothesis #1: If feelings of isolation increase, then sexual desire will decrease.
- Hypothesis #2: If the duration of social isolation increases, then the amount of sexual activity will increase.
- Hypothesis #3: If psychological stimulation decreases, then the amount of sexual activity will decrease.

2. Methods

2.1 Participants

The two authors of this paper served as the participants in its studies. Participants were both 27 years of age, and included one male, and one female. The participants were both undergraduate students at Camosun College who completed the current studies as an assignment for Psyc 110 ("Experimental Psychology") and were grouped together due to their mutual interest in sexuality. Both participants reside alone. All activity was conducted in a normal way following the provincial and local guidelines from Dr. Bonnie Henry.

2.2 Materials and Procedure

We first performed a correlational study to test concurrently all of our hypotheses by examining naturalistic daily changes in their variables longitudinally. Each participant kept a study journal with them at all times over this study's two-week period in order to record self-observations of the following four variables: (1) Amount of isolation, (2) duration of isolation, (3) psychological stimulation, (4) sexual desire and 5) sexual activity.

To measure the amount of isolation each participant experienced, each participant kept a journal and recorded a rating of how isolated they felt on a scale of 1 to 10 (1 being feeling socially satisfied, 10 being feeling lonely and isolated) each hour throughout the day. At the end of each day, an average was taken of these recordings.

To measure duration of isolation, each participant recorded the number of hours they had spent in isolation each day. Isolation was defined as being physically alone, with no other people in the same room. Online interactions were not included. This was recorded at the end of each day in the participants' journals when they went to bed.

To measure psychological stimulation, each participant noted an hourly recording of psychological stimulation on a scale of 1 to 10 (1 being bored, 10 being highly stimulated). At the end of each day, each participant took the average of their daily recordings.

To measure sexual desire, each participant recorded their feelings of sexual desire in their journals on an hourly basis, on a scale of 1 to 10 (1 being no desire at all, and 10 being overwhelming desire). At the end of each day, participants took the average of their daily recordings.

To measure sexual activity, each participant recorded their sexual activity at the end of each day, right before they went

to bed. Sexual activity was defined as each isolated instance of either sexual contact with another person, or masturbation.

To assess the strength and statistical significance of associations between variables predicted by our three hypotheses, we performed Pearson product moment correlations of their predictor variable (length of isolation) with their outcome variables (Sexual desire, sexual activity, and psychological stimulation). For hypothesis #1, we correlated each day's rating of isolation, with each day's rating of sexual desire. For hypothesis #2, we correlated the number of hours spent in isolation each day, with each day's amount of sexual activity. Hypothesis #3, we correlated each day's rating of psychological stimulation with each day's amount of sexual activity. We performed all of the above correlations separately for each participant as well as using data pooled across all of the participants. For the correlations using pooled data, in addition to using the raw data, we also performed correlations after we had first transformed the data from each participant into z-scored in order to standardize differences in averages and variability seen between the participants in their data and thus make them more comparable. A correlation coefficient was considered statistically significant if the probability of its random occurrence (p) was $< .05$ (i.e., less than 5% of the time expected by chance alone).

3. Results

As seen in Table 1, we had no significant data. Sexual desire did have a slight negative correlation with feelings of isolation using pooled raw data (all $r = -0.33$), however there was no statistical significance ($p = 0.087$). Duration of isolation did not appear to have significant correlation to sexual

activity using pooled raw data (all $r = -0.12$), nor statistical significance (all $p = 0.54$). It would appear that psychological stimulation had little if no correlation to sexual activity using pooled raw data (all $r = -0.02$), and showed no statistical significance (all $p = 0.93$). Despite none of our hypotheses showing a particularly strong correlation, it appears that the feelings of isolation one experiences had the strongest correlation with sexual desire.

4. Discussion

4.1 Summary of Results

Based on previous research, we hypothesized that an increase in sexual activity would occur with an increase in duration of social isolation, that a decrease in sexual activity would follow a decrease in psychological stimulation, and that a decrease in sexual desire would follow an increase in feelings of isolation. Data pooled across participants in our correlational study did not indicate support for any of our hypotheses.

4.2 Relation of Results to Past Research

Our correlational study failed to confirm a relationship between feelings of isolation and sexual desire reported by previous research. In a survey conducted by Li et al. (2020), 25% of participants reported a decrease in sexual desire during isolation in the initial stages of the COVID-19 outbreak (the survey was conducted between March 13 and 15, 2020). In contrast, our participants did not find a significant effect on sexual desire during periods of heightened isolation. However, a key difference is that in the study conducted by Li et al. (2020), participants were asked to report on sexual desire not only during a

complete isolation, but also prior to the complete isolation. Given that the participants in our correlational study reported longitudinally over a two-week period, we may be able to account for the discrepancies between the two studies based on the difference in time frame. Had we experienced a period of no isolation, quickly contrasted with a period of complete isolation, we may have been able to notice a more significant decrease in sexual desire. Additionally, the participants in our study were only experiencing partial isolation - we were still occasionally going to work or participating in activities. Whereas the participants in the study done by Li et al. (2020) compared a period of no isolation to a period of complete quarantine. Another discrepancy was that our study was conducted on only two participants, whereas the study by Li et al. (2020) was conducted on a group of 459 participants. Our small sample size could make it difficult to see overall trends. Future studies could account for these factors by recording data in more rigid periods of isolation vs non-isolation, and compiling data from a larger pool of participants.

The relationship between duration of isolation and amount of sexual activity that was found in past research was not noticeable in our study. Jacob et al. (2020) had found a link between the length of time individuals spend in isolation and the amount of sexual activity they partake in. In this study, they had found that 33.5% of people that were in isolation for 0-5 days were sexually active, whereas the number increased to 47% of individuals that were in isolation for more than 11 days. In our study however, we found no clear correlation between the two. However, there were significant differences in our methods that could attribute to this difference in findings. In the study conducted by Jacob et al.

(2020), participants were in a more strict lockdown, as the study took place at the beginning of COVID-19 (March, 2020). However, the participants in our study were both only partially isolating. Additionally, in the study by Jacob et al. (2020), duration of isolation was recorded in days, whereas in our study we recorded isolation in hours. We also discovered a slight inaccuracy when recording our duration of isolation by hours - since we were not including hours in which we were asleep (and waking hours varied daily), and we were both only spending minimal hours with other people, it was difficult to observe what portion of our waking days was in isolation, and what effect this had on our sexual activity. In future, studies may achieve more accurate results by recording duration of isolation as a percentage of each day's waking hours, or by recording hours spent with other people as opposed to hours spent alone.

Our findings did not replicate the results that Cito et al. (2020) found in April 2020. Cito et al. (2020) showcased that 40.9% of participants had a decrease in psychological stimulation leading to less sexual intercourse. In contrast to our study, in which we found little to no correlation between psychological stimulation and sexual activity. However, Cito et al. (2020) used a sample size of 1576 participants while we used two. While 96.8% of Cito et al. (2020) participants stated to be in a stable relationship, the two participants in our study are both single. Both studies happened during the COVID-19 pandemic however at different stages and in different countries. In

April 2020 Italy was being hit hard by the pandemic and was fully locked down, while Canada in November was starting to see a rise in cases and was in a partial lockdown with people still being able to participate with others. Future studies could aim to provide more data on both people in relationships and that are single so that we can properly understand the lasting effects that quarantines could have on our sexuality for years to come.

References

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- Jacob, L., Smith, L., Butler, L., Barnett, Y., Grabovac, I., McDermott, D., Armstrong, N., Yakkundi, A., & Tully, M. A. (2020). Challenges in the practice of sexual medicine in the time of COVID-19 in the United Kingdom. *Journal of Sexual Medicine*, 17(7), 1229-1236. <https://doi.org/10.1016/j.jsxm.2020.05.001>
- Li, W., Li, G., Xin, C., Wang, Y., & Yang, S. (2020). Challenges in the practice of sexual medicine in the time of COVID-19 in China. *Journal of Sexual Medicine*, 17(7), 1225-1228. <https://doi.org/10.1016/j.jsxm.2020.04.380>

Table 1

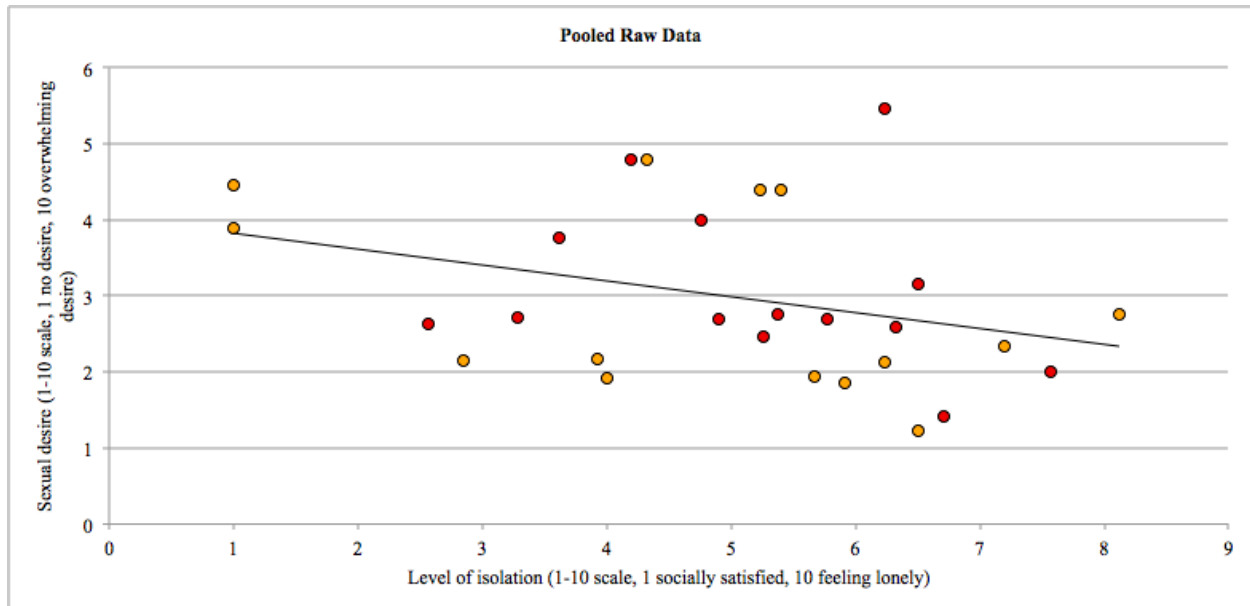
Correlation coefficient (r) values, with number of daily trials (n) per correlation in brackets.

Variables correlated	Participant #1	Participant #2	Pooled raw data	Pooled standardized data
[Level of isolation & sexual desire]	-0.23(14)	-0.42(14)	0.087(28)	[0.094](28)
[Duration of isolation & Amount of sexual activity]	0.04(14)	-0.27(14)	0.54(28)	0.56(28)
[Psychological stimulation & Amount of sexual activity]	-0.34(14)	0.45(14)	-0.02(28)	0.05(28)

* $p < .05$.

Figure 1

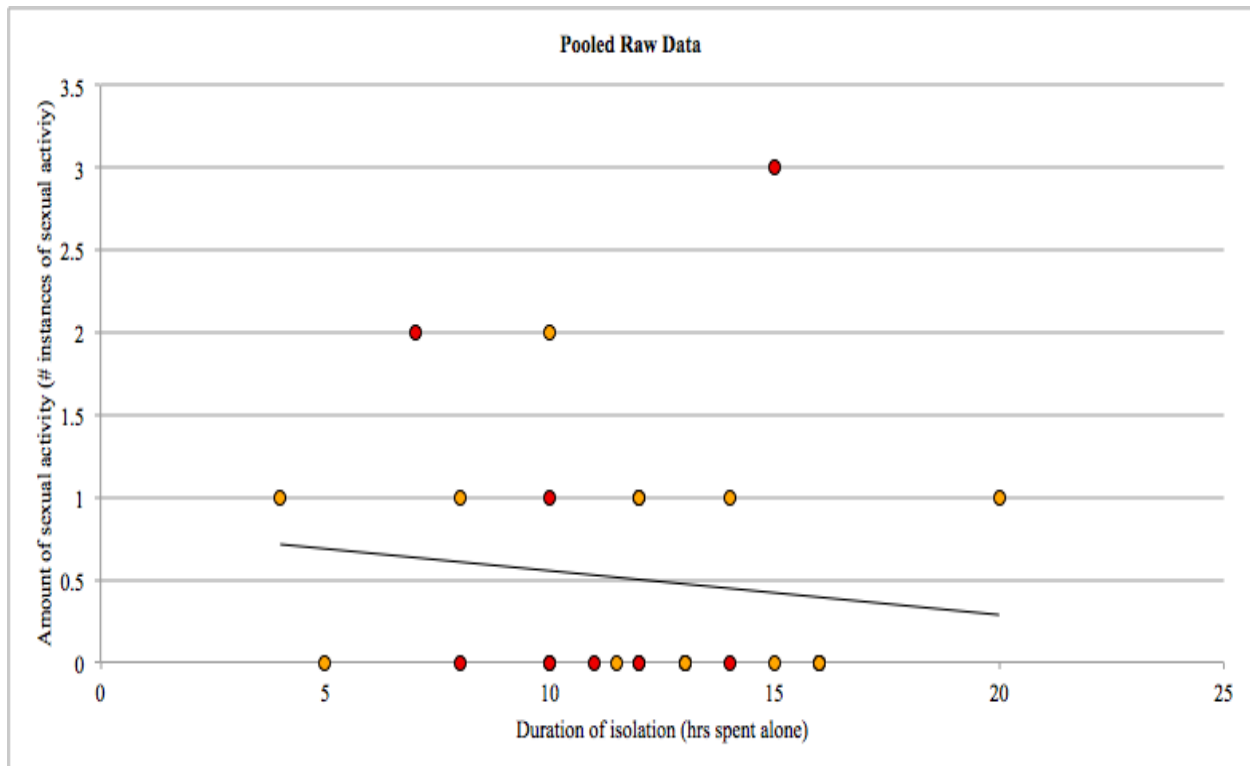
Scatterplot of level of isolation and sexual desire using pooled raw data across participants.



Marker color indicates which participant data is from: red = participant #1, orange = participant #2. Some data might not be visible in the figure due to overlapping markers.

Figure 2

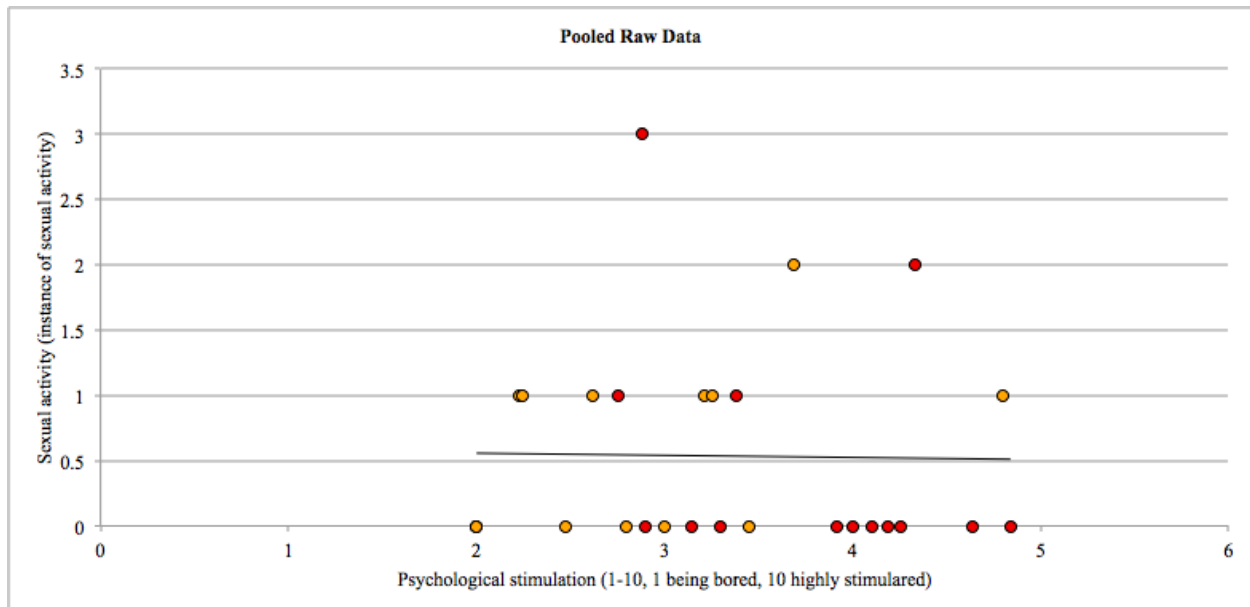
Scatterplot of sexual activity and duration of isolation using pooled raw data across participants.



Marker color indicates which participant data is from: red = participant #1, orange = participant #2. Some data might not be visible in the figure due to overlapping markers.

Figure 3

Scatterplot of psychological stimulation and sexual activity using pooled raw data across participants.



Marker color indicates which participant data is from: red = participant #1, orange = participant #2. Some data might not be visible in the figure due to overlapping markers.