

## Abstract

The dynamics of newly cohabiting couples and their effects on health behaviors remains limited yet important as new cohabitation is a sensitive period of adjustment for couples. Daily sex, eating, exercise habits, and baseline and post-baseline weights were examined in 75 newly cohabiting couples. Daily sexual activity was associated with more daily physical activity ( $b = 0.01$ ,  $t(2343) = 2.15$ ,  $p = .03$ ). However, we found that women who reported high levels of sex also reported eating more than their male counterparts, and couples reporting low levels of sex  $F(1, 2330) = 5.86$ ,  $p = .02$ . At 6 months post-baseline, women who reported having high levels of sex, gained a moderate, but significantly higher amount of weight than other groups  $F(1,111) = 4.1$ ,  $p = .04$ . Results suggest sexual activity may affect weight maintenance disparately in coupled women and men over time.

## Background

- Spousal like relationships are good for health (Robles, Slatcher, Trombello, & McGinn, 2014).
- However, little research has been done to examine how health behaviors including both eating and physical activity form in newly cohabiting couples.
- Previous research suggests that relationship dynamics may influence health behaviors amongst committed partners (Lewis, & Rook, 1999; Skoyen, Blank, Corkery, & Butler, 2013).
- While it is known that sexual intimacy and satisfaction promotes relationship satisfaction, well-being, and emotional intimacy among committed partners (Yoo, Bartle-Haring, Day, & Gangamma, 2014).
- Little is known about the effects of sexual intimacy and frequency on health behaviors such as eating, physical activity, and weight maintenance.

### Study Aims:

- To ascertain the association between daily sexual activity and daily eating, as well as physical activity in newly cohabiting couples.
- To ascertain the relationship between self-reported sexual frequency and weight maintenance in newly cohabiting couples.
- To understand whether there are gender differences among these relationships.

## Methods

**Procedures:** Data were collected as part of the Love, Anger, and Food (LAF) study that examined eating, exercise, emotion regulation, and weight maintenance in newly cohabiting couples. Data were collected using surveys (both baseline and daily diary), as well as through height and weight measurements. Time 2 weight was collected 6 months post-baseline. Some individuals were lost at Time 2 due to attrition.

### Participants:

A community sample of  $N = 100$  (married or unmarried) heterosexual couples (200 individuals) within the first 6 months of cohabitation.

### Measures:

- Time 1 and Time 2 weight measured in pounds during a laboratory visit.
- Sexual frequency was measured at baseline using the question: "How often do you and your partner typically have sexual contact?"
  - The scale ranged from 0 - 6 with 0 indicating, "once a year or less," and 6 indicating, "just about every day"
- Daily eating amount was measured daily for 10 days using an electronic daily diary.
  - The 5-point Likert scale ranged from -2 - 2; with 0 indicating, "I ate about the same amount as I usually do," and 2 indicating, "I ate much more than I usually do."
- Daily physical activity was also measured daily for 10 days using an electronic daily diary.
  - The 5-point Likert scale ranged from -2 - 2; with 0 indicating, "I did about the same amount of physical activity as I usually do," and 2 indicating, "I did much more physical activity than I usually do."
- Daily sexual activity was also measured daily for 10 days.
  - "How much sexual physical contact have you had with your partner?"
  - The scale ranged from 0 -10; "not at all - a large amount."

## Data Analyses and Results

### Data Analysis:

- Three analyses were completed. Each analysis accounted for the interdependence of couple data by using a multi-level model. Models 1 and 2 utilized repeated measures designs to account for longitudinal (diary) data. Complete data was only available for 75 couples.
- Model 1) Daily sexual activity was used to predict the outcome: daily physical activity.
  - Control variables included: relationship satisfaction, gender, and BMI.
  - An interaction between sexual activity and gender was tested, but removed as it did not predict physical activity.
  - A lag model was also tested: yesterday's sexual activity predicting today's physical activity.
- Model 2) Daily sexual activity was used to predict the outcome: daily eating amount.
  - Control variables included: relationship satisfaction, and BMI.
  - An interaction between sexual activity and gender was tested, and kept as the sexual activity X gender did significantly predict daily eating amount.
  - A lag model was also tested: yesterday's sexual activity predicting today's eating amount.
- Model 3) Self-reported sexual activity with one's partner was used to predict the outcome: Weight at 6 months post-baseline.
  - Control variables included: Time 1 weight, and relationship satisfaction
  - An interaction between gender and sexual activity was tested, and kept as the sexual activity X gender did significantly predict Time 2 weight.

	Women	Men	Total
	Mean(SD)	Mean(SD)	Mean(SD)
Age	26(8.6)	27.7(8.8)	26.8(8.8)
Relationship Satisfaction	6.6(0.96)	6.5(1.1)	6.5(1)
Relationship Duration*	22.63(15.9)	22.48(15.4)	22.6(15.6)
Children	--	--	0.05(0.23)
BMI (Time 1)	24.4(6)	27.4(11.4)	25.9(9.2)
Frequency of Sex	5.25(.61)	5.22(.69)	5.24(0.65)
Time 1 Weight (lbs)	146.2(37.7)	184.3(33.6)	165.2(40.6)
Time 2 Weight (lbs)	148.5(38)	188.1(39.1)	168(43.3)

Race/Ethnicity (N = 200)**	N (%)	N (%)	N(%)
Hispanic	22(22.2%)	23(25.6%)	45(23.8%)
White	72(74.2%)	64(71.1%)	126(65.6%)
Black	2(2.1%)	1(1.1%)	3(1.6%)
Asian	5(5.2%)	1(1.1%)	6(3.1%)
Other	17(17.5%)	23(25.6%)	40(20.8%)
Married	16(16.7%)	13(14%)	29(15.1%)
Income			
0-25K	69(70.4%)	61(66.3%)	130(67.7%)
25-50K	15(15.3%)	16(17.4%)	31(16.1%)
50-75K	10(10.2%)	11(12%)	21(10.9%)
75->150K	4(4.1%)	5(5.4%)	8(4.2%)

Note: SD = standard deviation; \* Relationship duration is measured in months; \*\*Some individuals did not answer all sociodemographic questions.

### Results:

- Model 1) Daily sexual activity was associated with more daily physical activity ( $b = 0.01$ ,  $t(2343) = 2.15$ ,  $p = .03$ ).
  - The interaction between sexual activity and gender was not significant
  - Lag model: yesterday's sexual activity was not associated with the next day's physical activity.
- Model 2) Women who reported high levels of sex also reported eating more than their male counterparts, and couples reporting low levels of sex  $F(1, 2330) = 5.86$ ,  $p = .02$ .
  - Lag model: yesterday's sexual activity was not associated with the next day's eating amount.
- Model 3) At 6 months post-baseline, women who reported having high levels of sex, gained a moderate, but significantly higher amount of weight than other groups  $F(1,111) = 4.1$ ,  $p = .04$ .

## Conclusions and Implications

### Findings:

- Broadly, we found that sexual frequency was related to health behaviors and weight maintenance.
- Specifically, we found that daily sexual activity was associated with more physical activity for both men and women.
- We also found that daily sexual activity was associated with a daily, larger eating amount for women, but not men.
- These effects, however, did not carry over to the next day. Thus, yesterday's sexual activity was not associated with the next day's physical activity or eating.
- We did find that at 6 months post-baseline, women who reported having high levels of sex, gained a moderate, but significantly higher amount of weight than women reporting low levels of sex, and all men.

### Implications:

- This study has provided evidence for an association between sexual activity and health behaviors contributing to weight maintenance.
- This study also suggests that sexual activity may affect weight maintenance disparately in coupled women and men over time.
- Further research is needed to elucidate these relationships. For example, does this relationship exist in couples that are not in transition (i.e. cohabitating for 1+ years)?
- Further research is needed to understand why there are gender differences among these relationships.
- Further research is needed for replication.

### Limitations:

- While the weight change in women was significant, it is probably not clinically important. Thus, further research is needed over larger spans of time (more than 1 year) to understand the relationship between gender, sexual activity, and weight maintenance.
- This study, while longitudinal, only utilized self-reports of eating, and physical exercise.
- Missing data were omitted from analyses at 25%

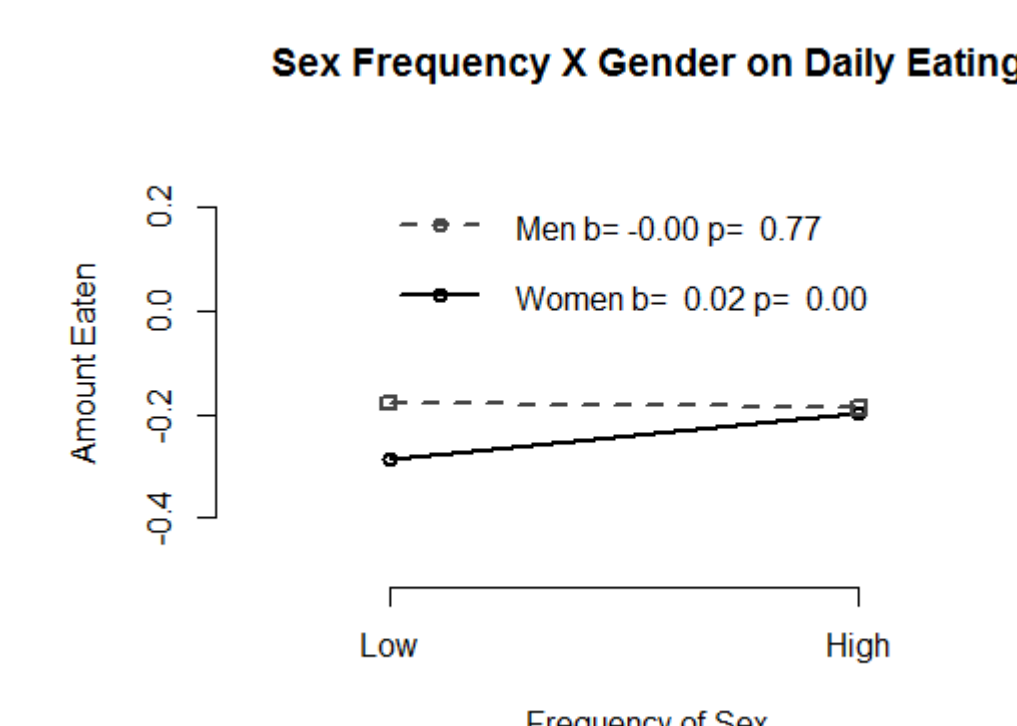


Figure 1. Interaction of daily sex frequency and gender on daily eating amount. Model controls for BMI, and relationship satisfaction.

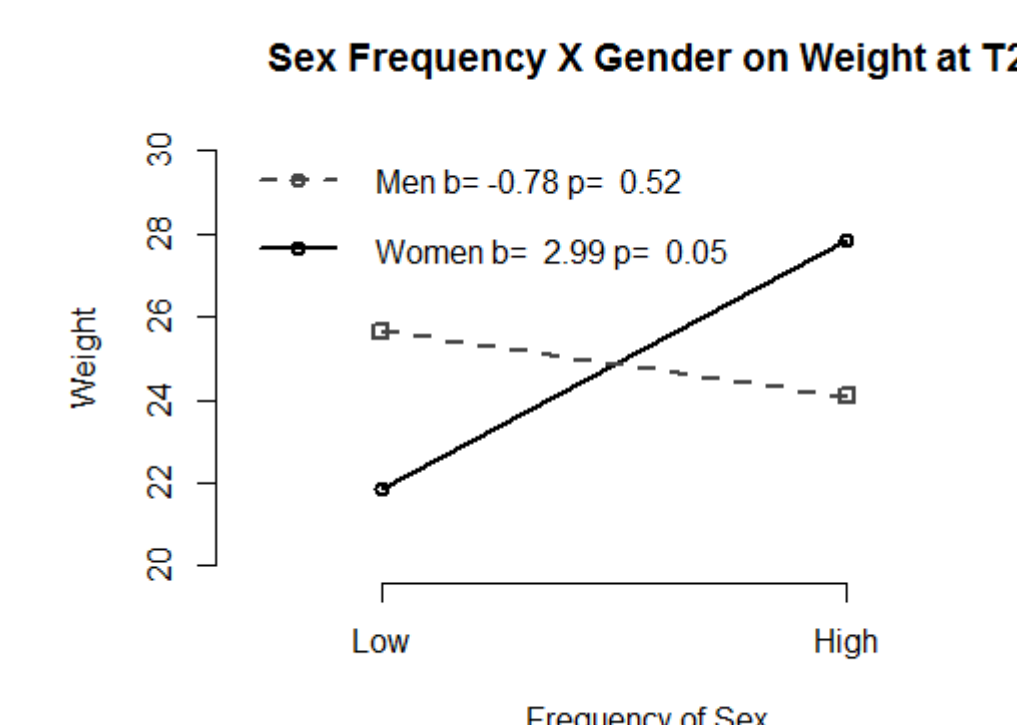


Figure 2. Interaction of sex frequency and gender on time 2 weight (6 months post-baseline). Model controls for T1 weight, and relationship satisfaction.



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