



# Partner Chair Massage: A Pilot Study of Feasibility, Acceptability, and Effect on Perinatal Mood, Anxiety, and Pain

Robin Byler Thomas, LMT, DrPH

## Introduction

- Perinatal mood and anxiety is a global concern
  - contributing to pregnancy and birth complications
  - affecting maternal and infant bonding
  - impacting childhood development
- Pregnant women seek massage for:
  - relaxation, emotional support, and pain management
  - may be limited by perceived socioeconomic barriers
    - time, costs, childcare, judgment in seeking mental health care
- In prior studies (Field, 2004, 2008, 2009)
  - pregnant women's partners learned side-lying massage
    - demonstrated health improvements (20-minute sessions)

## Objectives

- Examine the feasibility, acceptability, and effects of a partner chair massage on primary outcomes to perinatal mood and anxiety, and secondary outcomes of pain

## Methods

- Partners of pregnant women were taught chair massage
  - instructed to provide at home, twice weekly for 8-weeks
    - 10-minute sessions
- Pre-post intervention measures included:
  - Edinburgh Scale for mood
  - STAI for anxiety
  - VAS for pain
- Weekly text messaging over 8-weeks tracked
  - massage dose (minutes)
  - frequency (number of sessions)
- A project specific questionnaire evaluated
  - feasibility and acceptability
- Follow-up surveys measured sustainability
- Descriptive statistics described baseline participant data results, chair massage frequency and dose, project specific questionnaire responses, and sustainability
- Paired-sample *t*-tests analyzed the significance of partner chair massage effects on perinatal mood, anxiety, & pain



## Results

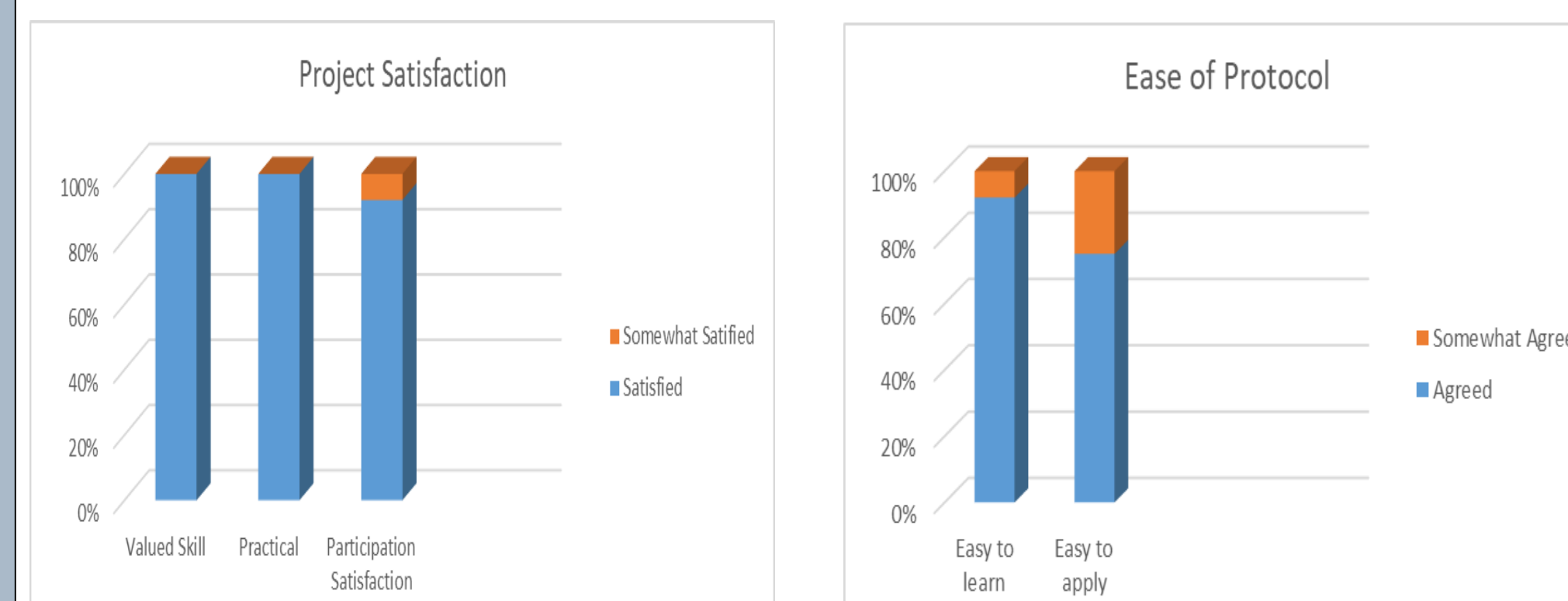
### Baseline Characteristics

N = 12 pregnant women (mean age = 32 y/o ± 3.86 SD)	Percentage & N
Hispanic	33% (04)
Non-Hispanic white	67% (08)
Trained during 2 <sup>nd</sup> trimester	83% (10)
Trained during 1 <sup>st</sup> and 3 <sup>rd</sup> trimesters	17% (02)
Married	100% (12)
Household Income	
< \$25,000	08% (01)
\$25,000-\$50,000	25% (03)
>\$50,000	67% (08)
Educational attainment	
College graduate	100% (12)
Had children under 18 at home	33% (04)
Expecting first child	67% (08)

### Massage Dose & Frequency

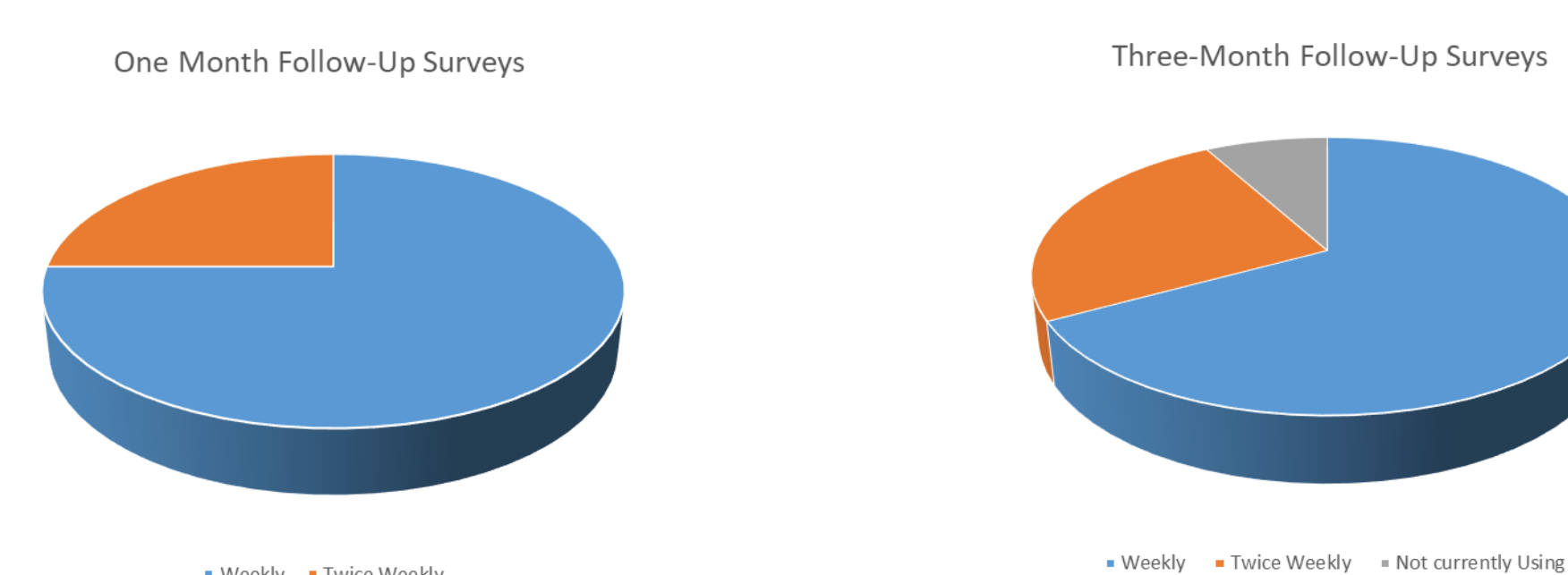
	N	Minimum	Maximum	Mean	Standard Deviation
Dose (minutes)	12	5.81	20.75	10.26	±3.74
Frequency (sessions)	12	12	16	14.92	±1.38

### Feasibility & Acceptability



- ❖ Study retention - 86%
- ❖ Protocol compliance - 94%

### Sustainability

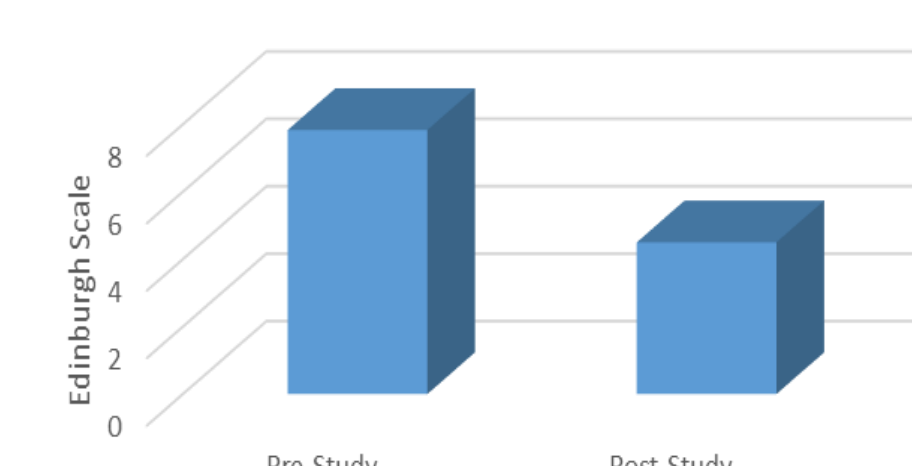


## Results

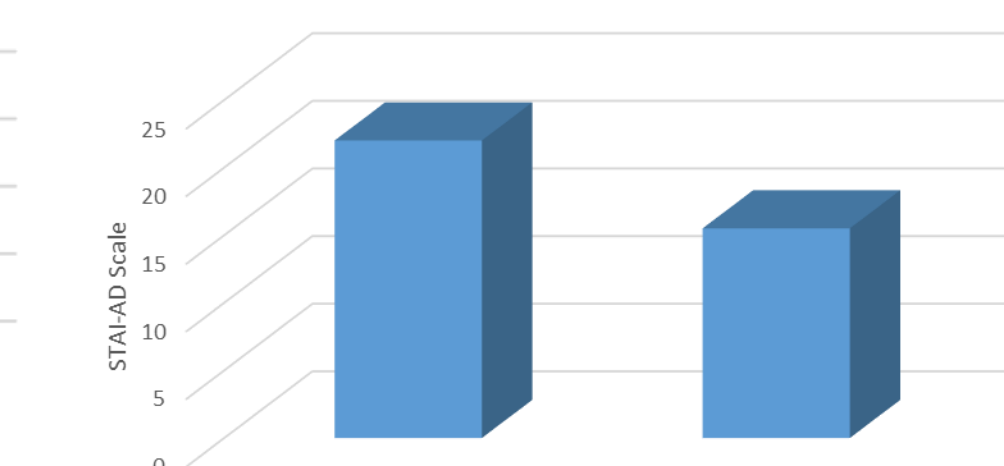
### Mood, Anxiety, and Pain Score Changes

N = 12 (Age)	Mood Pre	Mood Post	Mood Change	Anxiety Pre	Anxiety Post	Anxiety Change	Pain Pre	Pain Post	Pain Change
1 (31)	14.00	3.00	-11.00	28.00	15.00	-13.00	2.60	0.25	-2.35
2 (26)	10.00	6.00	-4.00	16.00	19.00	3.00	0.75	1.75	1.00
3 (31)	10.00	8.00	-2.00	21.00	16.00	-5.00	0.00	0.00	0.00
4 (31)	10.00	5.00	-5.00	26.00	12.00	-14.00	1.00	1.00	0.00
5 (36)	7.00	5.00	-2.00	23.00	15.00	-8.00	6.50	1.50	-5.00
6 (28)	7.00	3.00	-4.00	33.00	14.00	-19.00	2.50	0.65	-1.85
7 (40)	12.00	4.00	-8.00	30.00	17.00	-13.00	5.50	1.00	-4.50
8 (36)	4.00	0.00	-4.00	15.00	10.00	-5.00	0.25	0.00	-0.25
9 (30)	11.00	7.00	-4.00	23.00	19.00	-4.00	2.20	1.40	-0.80
10 (30)	6.00	5.00	-1.00	22.00	25.00	3.00	0.70	0.00	0.70
11 (34)	2.00	4.00	2.00	19.00	12.00	-7.00	0.70	0.25	-0.45
12 (33)	1.00	4.00	3.00	14.00	12.00	-2.00	0.50	1.75	1.25
<b>Average</b>	<b>7.83</b>	<b>4.50</b>	<b>-3.33</b>	<b>22.58</b>	<b>15.5</b>	<b>-7.08</b>	<b>1.93</b>	<b>0.80</b>	<b>-1.13</b>

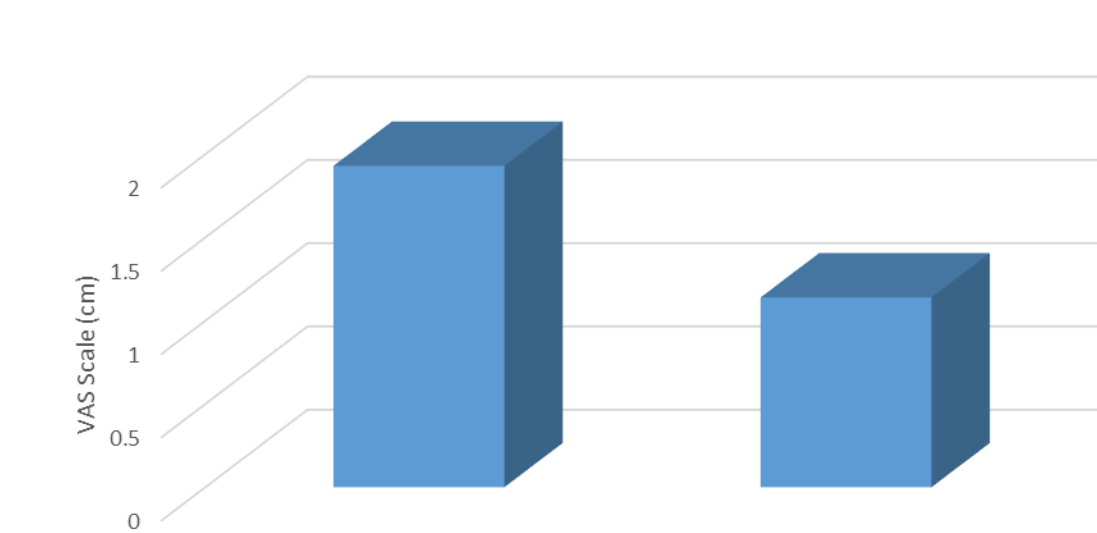
Change in Mood Mean Scores



Change in Anxiety Mean Scores



Change in Pain Mean Scores



### Summary of Effects

Outcomes	P-Values	Confidence Intervals	Mean & Standard Error	Effect Size Cohen's-d
Mood	0.012	0.89 - 5.78	3.33 ± 1.11	0.87
Anxiety	0.004	2.68 - 11.3	7.00 ± 1.96	1.03
Pain	0.071	-0.11 - 2.39	1.14 ± 0.57	0.58

## Conclusions

### Strengths

- Addressed women's perceived socioeconomic barriers
- Chair massage is efficient
  - used standard household chair
  - no lotions/oils/disrobing
  - in half the time of past studies (Field, 2004, 2008, 2009)
- Allowed husbands to be actively involved in pregnancy

### Limitations

- Small sample size
- Lack of control group
- Self-reports
- Bias and internal control

### Final Conclusions

- First partner perinatal chair massage study
- Effective complementary home management of
  - perinatal mood, anxiety, and pain

## Implications for Massage Therapists

- Extend client benefits between visits
  - teach partners
- Promote your business
  - teach disadvantaged groups chair massage skills
- Health promotion
  - refer clients who may need additional support to local resources

## References

- Field, T., Diego, M. A., Hernandez-Reif, M., Schanberg, S., & Kuhn, C. (2004). Massage therapy effects on depressed pregnant women. *Journal of Psychosomatic Obstetrics & Gynecology*, 25(2), 115–122.
- Field, T., et al. (2008). Massage therapy reduces pain in pregnant women, alleviates prenatal depression in both parents and improves their relationships. *Journal of Bodywork and Movement Therapies*, 12(2), 146–150.
- Field, T., Diego, M., Hernandez-Reif, M., Deeds, O., & Figueiredo, B. (2009). Pregnancy massage reduces prematurity, low birth weight and postpartum depression. *Infant Behavior and Development*, 32(4), 454–460.

## For More Information

- Robin Byler Thomas: rbthomas@email.arizona.edu
- 520-730-1154