

# **The Relationship of Maternal-Fetal Attachment and Health Behavior Among Pregnant Women South Taiwan**

**Ling-Hua Wang, Ph.D., RN.**  
School of nursing  
Fooyin University in Taiwan.

**Andrew C. Mills, Ph. D., RN.**  
School of Nursing  
Saint Louis University in USA.

# Background

- Good health practices and fetal health.
- Socio-economic status and prenatal outcomes.
- Low family income and good health practices.
- Maternal-fetal attachment and positive health behaviors.

# Purpose

The effect of maternal-fetal attachment on health behaviors, controlling for prenatal and maternal characteristics.

# Two Research Hypotheses

1. Pregnant women in rural areas in south Taiwan will have poorer health practices than in urban areas.
2. The level of maternal-fetal attachment will predict health behaviors of Taiwanese pregnant women.

# Methodology

- A cross-sectional research design.
- Sample size: 390.
- Inclusion criteria:
  - 20 to 42 gestational weeks.
  - 18 to 45 years old.
- Data analysis.

# Instruments

## **The 21-Item Health Practices Questionnaire-II**

1. Avoiding Harmful Behaviors.
2. Making Healthy Choices.

## **The Modified Maternal-Fetal Attachment Scale**

1. Preparing Maternal Role Tasks.
2. Communicating with the Baby.

# Results

## Maternal Characteristics

1. Age 18 - 43 yrs old (29.5 ± 4.48 )
2. Married 96.9%
3. Insured 99.2%
4. Education 52.8% (junior college)
5. Employed 51.1%
6. Living in rural 53%
7. Poverty level 63.9%

# Results

## Prenatal Characteristics

1. Planned pregnancy: 57.2%
2. Wanted pregnancy: 74.9%
3. No pregnant complication: 87.4%
4. Spontaneous pregnancy: 99.2%
5. Parity (live births): 0-4
6. Gravidity (pregnancy): 1-8
7. Number of children: 0-5
8. Gestational age: 20-40<sub>wks</sub> ( $M = 31$ )



# Results of Hypotheses Testing

The **first** hypothesis was not supported by the results (**IV: Women living in the rural area**).

## DVs in sequential multiple regression models

- Global Health Behaviors ( $B = - 0.51, p = 0.62$ )
- Avoiding Harmful Behaviors ( $B = - 0.43, p = 0.51$ )
- Making Healthy Choices ( $B = - 0.08, p = 0.90$ )

## DVs in sequential logistic regression models

- Global Health Behaviors (OR = 0.67;  $p = 0.16$ )
- Avoiding Harmful Behaviors (OR = 0.92;  $p = 0.74$ )
- Making Healthy Choices (OR = 0.59;  $p = 0.06$ )

# Results of Hypotheses Testing

The **second** hypothesis was partially supported by the results (**IV: Preparing Maternal Role Tasks**).

## DVs in sequential multiple regression models

- Global Health Behaviors ( $B = 0.29, p < .001$ )
- Avoiding Harmful Behaviors ( $B = 0.19, p < .001$ )
- Making Healthy Choices ( $B = 0.10, p = 0.01$ )

## DVs in sequential logistic regression models

- Global Health Behaviors (OR = 1.08;  $p < .001$ )
- Avoiding Harmful Behaviors (OR = 1.06;  $p = .001$ )
- Making Healthy Choices (OR = 1.05;  $p = .02$ )

# Results of Hypotheses Testing

The **second** hypothesis was partially not supported by the results (**IV: Communicating with the Baby**)

## DVs in sequential multiple regression models

- Global Health Behaviors ( $B = 0.09, p = .23$ )
- Avoiding Harmful Behaviors ( $B = 0.02, p = .72$ )
- Making Healthy Choices ( $B = 0.07, p = .09$ )

## DVs in sequential logistic regression models

- Global Health Behaviors (OR = 1.02;  $p = .26$ )
- Avoiding Harmful Behaviors (OR = 1.02;  $p = .23$ )
- Making Healthy Choices (OR = 1.03;  $p = .17$ )

# Results: Additional Findings

## Sequential Multiple Regression Analysis

Predictors	Education	Employed	Children	Age	Poverty	Marital
Total score of health behaviors	+	-	-	+	-	
Avoiding harmful behaviors	+	-	-	+		+
Making healthy choices	+	-	-		-	

# Results: Additional Findings

## Sequential Logistic Regression Analysis

Predictors	Education	Employed	Age	Wanted pregnancy
Total score of health behaviors	OR = 1.18		OR = 1.12	
Avoiding harmful behaviors		OR = 0.44	OR=1.13	
Making healthy choices	OR = 1.24			OR = 2.69

# Results: Additional Findings

## Descriptive statistics of the instruments

- Did not exercise regularly (80%).
- Did not have regular dental care (79%).
- Did not get enough fluid without caffeine a day (88%).

# Discussion

## Hypotheses 1:

Living in a rural area *did not* predict the health behaviors of pregnant women.

## Hypotheses 2:

The second subscale of MFA *does not* predict pregnant women's health behaviors.

# Additional Findings

**These results are consistent with previous studies:**

- 1. Education.**
- 2. Number of children.**
- 3. Age.**
- 4. Poverty level.**
- 5. Marital status.**



# Additional Findings

**The result is *inconsistent* with previous studies:**

- **Employment.**

**No study to compare with the result:**

- **Wanted pregnancy.**

# Implications

- 1. Clinical.**
- 2. Research.**
- 3. Education.**
- 4. Policy Implication.**

# Acknowledge

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