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

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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.

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 ($29.5 \pm 4.48$)
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
7. Number of children: 0-5
8. Gestational age: 20-40\text{wks} (\bar{M} = 31)
Results of Hypotheses Testing

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

**DV**s 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 \( (B = -0.08, p = 0.90) \)

**DV**s 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

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Education</th>
<th>Employed</th>
<th>Children</th>
<th>Age</th>
<th>Poverty</th>
<th>Marital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total score of health behaviors</strong></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Avoiding harmful behaviors</strong></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>Making healthy choices</strong></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
### Results: Additional Findings

#### Sequential Logistic Regression Analysis

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Education</th>
<th>Employed</th>
<th>Age</th>
<th>Wanted pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score of health behaviors</td>
<td>OR = 1.18</td>
<td></td>
<td>OR = 1.12</td>
<td></td>
</tr>
<tr>
<td>Avoiding harmful behaviors</td>
<td>OR = 0.44</td>
<td>OR = 1.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making healthy choices</td>
<td>OR = 1.24</td>
<td></td>
<td></td>
<td>OR = 2.69</td>
</tr>
</tbody>
</table>
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

• Saint Louis University.

• Fooyin University.

• International Peace Scholarship.

• Shaw-Englar founding.
Thanks for your attention!!