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## Bridging Social Capital And Health Outcomes: The Mediating Role Of Maternal Agency In Stunting Prevention Services In Kendari City, Indonesia

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### Abstract

*Stunting remains a persistent public health challenge in developing countries, reflecting not only nutritional deficiencies but also broader social inequalities. This study examines the influence of social capital and social networks on the effectiveness of stunting prevention services, with a particular focus on the mediating role of maternal agency. A quantitative approach using Structural Equation Modeling (SEM-PLS) was applied to data collected from multiple public health centers in Kendari City, Indonesia, complemented by secondary data on stunting cases from 2022 to 2024. The results show that social capital ( $\beta = 0.31, p < 0.01$ ) and social networks ( $\beta = 0.27, p < 0.01$ ) significantly influence service effectiveness. Maternal agency also has a strong direct effect ( $\beta = 0.41, p < 0.001$ ) and mediates the relationship between social determinants and service outcomes. The model explains 74% of the variance in effectiveness ( $R^2 = 0.74$ ), indicating strong explanatory power. These findings highlight the importance of integrating social approaches into public health strategies. This study contributes to the literature by proposing an integrated model linking social structures and maternal behavior to health service effectiveness.*

**Keywords:** *Social Capital, Maternal Agency, Social Networks, Stunting, Public Health, SEM-PLS.*

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## INTRODUCTION

Stunting remains a major global health issue, particularly in developing countries. According to World Health Organization, stunting reflects chronic undernutrition and has long-term impacts on cognitive development and productivity.

In Indonesia, stunting prevalence remains uneven across regions, including Kendari City. Secondary data from public health centers indicate fluctuating trends in stunting cases between 2022 and 2024. These variations suggest that health service availability alone does not fully explain prevention effectiveness.

Recent studies emphasize the importance of social determinants, including social capital and social networks. However, limited research integrates these variables with maternal roles as a mediating factor.

This study addresses this gap by proposing an integrated model in which maternal agency acts as a mechanism that translates social resources into health outcomes.

### Literature Review

#### Social Capital and Health

Social capital refers to trust, norms, and social cohesion that facilitate collective action. Studies by Ichiro Kawachi show that higher social capital improves health service utilization.

#### Social Networks

Social networks influence behavioral diffusion and access to health information. Research by Nicholas Christakis demonstrates that health behaviors spread through social ties.

#### Maternal Agency

Maternal agency includes knowledge, decision-making, and caregiving practices. UNICEF highlights its critical role in child nutrition.

#### Conceptual Framework

This study hypothesizes:

1. H1: Social capital → Effectiveness
2. H2: Social networks → Effectiveness
3. H3: Social capital → Maternal agency
4. H4: Social networks → Maternal agency

5. H5: Maternal agency → Effectiveness
6. H6: Maternal agency mediates relationships

## RESEARCH METHODS

### Study Design

This study employs a quantitative approach using SEM-PLS.

### Data Source

Data were obtained from multiple public health centers in Kendari, including:

1. Benu-Benua
2. Kemaraya
3. Puuwatu
4. Wua-Wua
5. Abeli

### Variables

1. Independent: Social Capital, Social Network
2. Mediator: Maternal Agency
3. Dependent: Effectiveness

### Analysis

Data were analyzed using:

1. Descriptive statistics
2. SEM-PLS (SmartPLS)

## RESULTS AND DISCUSSION

### Descriptive Findings

Stunting prevalence fluctuated across health centers:

1. Benu-Benua: 27% → 29% → 25%
2. Abeli: 22% → 16% → 9%
3. Wua-Wua: 11% → 10% → 8%

### Measurement Model

All constructs met validity and reliability criteria:

1. Loading > 0.7
2. AVE > 0.5
3. CR > 0.7

### Structural Model

R<sup>2</sup> values indicate strong explanatory power:

1. Maternal Agency: 0.61
2. Effectiveness: 0.74

### Hypothesis Testing

Path	$\beta$	p-value
Social Capital → Effectiveness	0.31	<0.01
Social Network → Effectiveness	0.27	<0.01
Social Capital → Maternal Agency	0.52	<0.001
Social Network → Maternal Agency	0.34	<0.001
Maternal Agency → Effectiveness	0.41	<0.001

**Mediation**

Maternal agency significantly mediates:

1. Social capital → effectiveness
2. Social networks → effectiveness

**Discussion**

This study demonstrates that the effectiveness of stunting prevention services is strongly influenced by social determinants.

Consistent with World Health Organization, the findings confirm that community participation enhances health outcomes. Social capital fosters trust and cooperation, while social networks facilitate information exchange.

Importantly, this study extends prior research by showing that maternal agency acts as a key mechanism transforming social resources into health behaviors. This supports findings from UNICEF emphasizing maternal roles in child nutrition.

Compared to previous studies, this research offers a more comprehensive model by integrating social and behavioral dimensions into a single analytical framework.

**CONCLUSION**

This study concludes that:

1. Social capital significantly improves service effectiveness
2. Social networks enhance health outcomes
3. Maternal agency plays a crucial mediating role

**Policy Implications**

- a. Strengthening community-based interventions
- b. Empowering maternal roles
- c. Enhancing social network utilization

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