## ORIGINAL ARTICLE

# Structure Model of Factors Relating to Reproductive Behaviors Among Blinded People in Indonesia

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#### ABSTRACT

Introduction: Persons with disabilities are often neglected in reproductive health programs, putting them at risk of reproductive health problems. However, factors associated with reproductive health behavior among blinded people remain less studied in Indonesia. This study aimed to determine the effect of family self-efficacy, and motivation on reproductive health behavior among blinded people. support, Methods: This research is a cross-sectional study. A total of 105 respondents agreed to join in this study. Sampling using simple random sampling. Family support was measured using the multidimensional scale of perceived social support (MSPSS). The motivation was assessed using Social Motivation Questionnaire (SMQ), while self-efficacy was measured using Self-Efficacy Survey. Statistical analysis using path analysis. Results: There were 67 people aged 20-35 (63.8%), 58 men (55.2%), 45 people with special needs (42.9%), and 36 people working as a housewife (34.5%). Reproductive health behavior is directly influenced by family support (b=0.313, p=0.000), self-efficacy (r=0.193, p=0.049), and motivation (b=0.321, p=0.000). Family support has an indirect effect on reproductive health behavior through self-efficacy and self-motivation. Self-efficacy has an indirect effect on reproductive health behavior through motivation. Conclusion: There is an effect of family support, self-efficacy, and motivation on reproductive health behavior. Improvements in the conditions associated with these factors should be made to ensure that women have the right to participate in reproductive decision-making.

Keywords: Family support, Motivation, Reproductive health behavior, Self-efficacy

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## INTRODUCTION

People with physical disabilities, such as those who are visually impaired, account for one-third of all people with disabilities (1). The constraints of the blind have an impact on their ability to participate in social activities. Generally, many people with disabilities are taught to remain silent and submissive, and as a result, they are not provided with fundamental facts about how their bodies develop and change as they grow and mature (2–4). Specifically, women with disabilities are frequently overlooked in reproductive health programs, putting them at high risk for reproductive health issues (2). Reproductive health behavior is evaluated in terms of aspects such as evaluating the health of reproductive organs, refusing to have sexual contact, and preventing various diseases such as sexually transmitted infections (STIs) and HIV/AIDS (5). Prejudice and discrimination against people with disabilities, particularly women, persists worldwide, resulting in repeated and often severe violations of sexual and reproductive health and rights (6). Thus, people with disabilities experience plenty of reproductive rights discrimination (7), such that they receive sparse reproductive health and sexuality information. This is due to a lack of access to health services such as counseling, coaching, assistance, and poor communication skills among health personnel, especially among disabled persons (8).

Family support is one of the factors that influence reproductive health behavior. Family support has

a favorable impact on knowledge, attitudes, and behaviors (9). Motivation is another aspect affecting reproductive health that leads an individual to exhibit perseverance, tenacity, interest, and independence to preserve and behave reproductively healthy (10,11). High motivation will further arouse the blind to live a healthy life, including the health of their reproductive system (12). In addition, Self-efficacy also plays a crucial role in encouraging individuals to engage in and maintain healthy behaviors, particularly reproductive health behaviors (13). Self-efficacy refers to an individual's belief in his or her ability to mobilize the motivation, cognitive resources, and action in response to a given set of circumstances. When someone confident in their abilities is faced with a challenge, they will do everything in their power to overcome it. (14). However, factors associated with reproductive health behavior among blinded people remain less studied in Indonesia. The purpose of this study was to analyze the effect of family support, self-efficacy, and motivation on reproductive health behavior in women with disabilities.

#### MATERIALS AND METHODS

#### Study design

This study was conducted using a cross-sectional design in Sukabumi City, West Java, Indonesia.

#### Sample

The sample in this study was people with visual impairment, aged over 18 years, and willing to participate in this study. The exclusion criteria were women with gynecology problems such as cancer, infection, or fertility issues. The sample size was calculated using G-Power Software version 1.3 assuming F test, with alpha was o.5, the power level was 0.8, and the effect size was 0,15 (medium effect size). A total of 105 respondent were recruited in this study. Sampling using simple random sampling.

#### Instrument

Participants completed a demographic questionnaire to ascertain their ages, gender, level of education, and employment status.

Family support was measured using the multi dimensional scale of perceived social support (MSPSS) questionnaire, which includes 12 items about family, friends, and significant individuals and other concerns connected to perceived social support. The Cronbach alpha in the current study was 0.89. The motivation was assessed using Social Motivation Questionnaire (SMQ), which includes 12 items. A higher score indicated higher motivation. The Cronbach alpha in the current study was 0.80. While self-efficacy was measured using Self-Efficacy Survey. Each item uses a six-point Likert scale, with 1 indicating strong disagreement and 6 indicating strong agreement, to assess each subject's perceived self-efficacy in many aspects of life. The Cronbach alpha in the current study was 0.83. Reproductive health behavior was adopted from the World Health Organization survey on sexual and reproductive behaviors, consisting of 23 items. The Cronbach alpha in the current study was 0.78.

#### **Ethical consideration**

The ethical committee reviewed and approved this study (No. 025/KEPK/STIKEP/PPNI/JABAR/VIII/2020). Written informed consent was obtained before the data collection took place. When we were collecting data, we explained the right to withdraw and anonymity, and they may refuse to answer any questions without penalty. We also handed each student a one-page information sheet with the study's purpose and the principal investigator's contact information.

#### Data analysis

A descriptive statistical was used to analyze data on demographic characteristics and studied variables. The factors related to reproductive health behaviors were assessed using the Structural Equation Modeling (SEM) method. The Kolmogorov–Smirnov test revealed that the data distribution was normal. The data were analyzed with SPSS software version 23.0 and Lisrel software. Statistical significance was defined as p-values less than 0.05.

## RESULTS

There were 67 people aged 20-35 (63.8%), 58 men (55.2%), 45 people with special needs (42.9%), and 36 people working as a housewife (34.5%) (Table I). The mean value of family support was 73.21 (SD=9.00), the self-efficacy was 31.23 (SD=3.47), motivation was 69.32 (SD=8.28), and reproductive health behavior was 43.91 (SD=6.24) (Table II).

Family support has an indirect effect on reproductive health behavior via motivation (b=0.074), self-efficacy (b=0.074), and a combination of self-efficacy and motivation (b=0.074) (0.032). Through motivation, self-efficacy indirectly affects reproductive health behavior (b=0.180) (Table 3). Family support has a direct effect on reproductive health behavior (b=0.313, p=0.000), self-efficacy (r=0.193, p=0.049), and motivation (b=0.321, p=0.000), as demonstrated in Figure 1. Additionally, self efficacy has a direct effect on reproductive health behavior (b=0.382, p=0.000) and motivation (b=0.718, p=0.001). While motivation is a significant factor in reproductive health behavior (0.0231).

Characteristics	n	%
Age		
< 20	10	9.5
20 – 35	67	63.8
> 35	28	26.7
Gander		
Male	58	55.2
Famale	47	44.8
Education level		
Elementary school	27	25.7
Junior high school	45	42.9
Senior high school	25	23.8
University	8	7.6
Job Status		
Employed	99	94.3
Unemployed	6	5.7

Table I : Demograph	nic characteristics of studied
participants (n=105)	)

#### DISCUSSION

The study's findings indicate that family support affects reproductive health behavior. This is consistent with prior research indicating a relationship between family support and reproductive health behavior (15,16). Indirectly, family support influences reproductive health behavior. People who have a support system from their families are more likely to have greater self-confidence, which might cause them to favor positive habits, including choosing to remain safe and sexually healthy (17). Family support is critical in developing enthusiasm and motivation for individuals with disabilities and can assist enhance motivation and self-confidence, allowing people with disabilities to continue their reproductive health behaviors in this scenario (18,19).

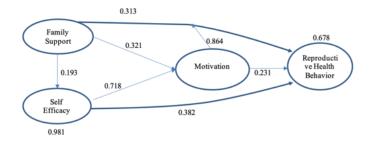


Figure 1. Structure Model of Factors Relating to Reproductive Behaviors

**Figure 1 :** Structure model of Factors Relating to Reproductive Behaviors

#### Table II : Descriptive statistics of studied variabels

Variable	Mean	SD	Minimum	Maximum
Family Support	73.21	9.	52	88
Self Efficacy	31.23	3.47	21	37
Motivation	69.32	8.28	52	85
Reproductive Health Behavior	43.91	6.24	27	55

#### Table III : Direct effect, inderect effect and a total effect of independent variables on self efficacy

Variables	Direct Effect	p-value	Indirect Effect	Total Effect	
Family Support	0.313	0.000	(0.321x0.231) +(0.193x-0.382)	0.180	
Self Efficacy	0.382	0.004	+(0.193x0.718x0.231)	0.180	
Motivation	0.231	0.000	(0.781x0.231)	0.231	

The findings indicated that self-efficacy affected reproductive health behavior. These findings corroborated earlier research indicating that selfefficacy affected reproductive health behavior (20,21). Self-efficacy is a person's belief in his or her ability to behave in a way that enables him or her to solve task issues that must be solved to accomplish a goal or achieve success (22). Some people with disabilities have low self-confidence in their capacity to accomplish a goal (23). Some people with disabilities have low self-confidence in their capacity to accomplish a goal.

As a result, individuals with disabilities require support from their surroundings to develop a sense of confidence in their skills, particularly when it comes to reproductive health habits. Their increased confidence increases their trust in their ability to engage in reproductive health practices in the same way that other people do (22).

The findings indicated that motivation affected reproductive health. Similar to a previous study that reported that motivation affects reproductive health. (24,25). Motivation is a change in energy in a person marked by the emergence of "feeling" and is preceded by a response to the existence of a goal. Individuals need to increase their motivation to understand reproductive health as part of maintaining and preventing health, especially reproductive health (26). Motivation is a shift in a person's energy that is characterized by the emergence of "feeling" and is preceded by a reaction to the existence of a goal. Individuals must enhance their motivation for reproductive health education to preserve and prevent health, particularly reproductive health (27).

Self-efficacy influences reproductive health behavior indirectly through motivation. A previous study emphasized that self-efficacy significantly impacts motivation in people with disabilities (28). Many persons with disabilities lack confidence, believe they are incapable of doing tasks that most people do and believe that being disabled equates to being incapable (23). Individuals with a high sense of selfefficacy will be more motivated to complete particular tasks than individuals with a low sense of selfefficacy. Someone with a high sense of self-efficacy will be driven to take action to result in more positive behavior, including reproductive health behavior (29).

The study's cross-sectional design constituted a weakness because the relationship's causality was uncertain. The results are only generalizable to the Indonesian society and nations with similar psychological and cultural conditions. The model should be tested to see if it can be applied to other communities before being implemented. This study's findings may be used to explore reproductive health in blind adolescents better.

## CONCLUSION

The study found an association between family support, self-efficacy, and motivation on reproductive health behaviors. This research will have an impact on the advancement of public health, particularly reproductive health. Improvements in the conditions associated with these factors should be made to ensure that women have the right to participate in reproductive decision-making. This study's findings may be used to explore reproductive health in blind adolescents better.

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