The Relationship between Self-Efficacy, Media Dependency, and Mother's Ability to Care for Children Who Experience Hospitalization Anxiety

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KEYWORDS

Self-efficacy, media dependency, anxiety, mother's ability to care for children with anxiety

ABSTRACT

This study aims to examine the contribution of self-efficacy and media dependency to the mother's ability to care for children experiencing hospitalization anxiety, testing the mediating effect of media dependency on the relationship between self-efficacy and the mother's ability to care for children experiencing hospitalization anxiety. The design of this study uses a descriptive cross-sectional study with a purposive sampling technique. A total of 132 mothers with children experiencing hospitalization anxiety were used as samples in this study. Regression analysis and mediation analysis using SPSS were used to test the hypotheses in this research. Self-efficacy and media dependency explain 52% of mothers' ability to care for children who experience hospitalization anxiety after controlling for demographic variables (age, occupation, and education). In the mediation analysis, media dependency partially mediates the relationship between self-efficacy and the mother's ability to care for children who experience hospitalization anxiety.

Introduction

Child anxiety due to hospitalization is a problem that is still very often faced by nurses. Anxiety is a state of worry and fear, which originates from uncertainty and concern about unknown things (Muyasaroh et al., 2020). This problem continues to be a global concern, data from the World Health Organization (WHO) in 2017 estimated that more than 5 million American children were hospitalized for surgery, and more than half experienced anxiety and stress. Additionally, UNICEF reported in 2017 that of the 148 million preschool children in the world's largest countries, approximately 57 million children each year, or 75% of those hospitalized, experience trauma such as anxiety.

In the realm of treating children's anxiety in hospital, the mother's ability to provide care is very important. According to research by Sigurdardottir et al. (2022), mothers' proactive participation in children's hospital care can have an important impact in reducing children's anxiety levels (Sigurdardottir et al., 2022). Therefore, the mother's ability to care for children

who experience anxiety during hospitalization needs to be looked at at the factors that influence it.

Several empirical studies show that increasing maternal self-efficacy through various interventions, such as parent education or therapeutic counseling, can improve maternal parenting skills for children experiencing anxiety (Scheel & Rieckmann, 2018). Mothers with high levels of self-efficacy show greater initiative in seeking information, using effective techniques, and persisting in their efforts to help their children manage their anxiety (Hock et al., 2012).

Media *dependency* is dependence on the media in meeting individual information needs, where the need for media is defined as a person's motivation to use media, namely; understanding, orientation, and *play* (Ball-Rokeach & Defleur, 1976). Mothers with children who experience anxiety in the pre-operative phase really need information to improve their ability to care for children who experience anxiety. However, The difficulty for parents to see doctors and nurses when they need information and help makes them turn to using the internet and other online sources to look for information (Ewa et al., 2016). Mothers' dependence on media can provide an interesting perspective regarding the role of media in increasing mothers' ability to care for children who experience hospitalization anxiety. Research shows that mothers often rely on media, especially social media and online sources, to seek information and support regarding child care (Lau et al., 2021).

Mothers with children who experience anxiety in the pre-operative phase experience various kinds of obstacles in getting information about their child's anxiety. On the one hand, mothers really need this information to improve their ability to care for children who experience anxiety. Mothers find it difficult to get information about where to seek help when their child experiences anxiety, mothers find it difficult to consult about their child's anxiety with health workers and parents lack information support from health workers in caring for anxious children (Reardon et al., 2018).

Research shows that social media use significantly influences self-efficacy, which in turn affects their academic performance and digital literacy skills (Jinhui et al., 2023). Additionally, research on healthcare providers reveals that media exposure can moderate the effects of self-efficacy on stress and anxiety, suggesting that reliance on media for information may shape perceptions of self-efficacy during a crisis (Alexandra et al., 2023). A longitudinal study conducted in Finland and the United States during the COVID-19 pandemic found that individuals who engaged with multiple media channels daily demonstrated higher COVID-19 self-efficacy and were more likely to adhere to health protective measures (Aki et al., 2023).

Method

Research design

The research design uses *Cross-sectional study*. A total of 132 mothers from two hospitals, namely Mataram City Regional Hospital and NTB Provincial Regional Hospital with children undergoing hospitalization were used as research respondents. The sampling technique used was purposive sampling. Inclusion criteria: Mothers who have children aged 3-6 years who are undergoing hospitalization, mothers who own a smartphone, mothers who actively use social media (such as Facebook, Instagram, YouTube) as a support tool during the child's hospitalization period. Exclusion criteria: Mothers who are not willing to provide the information required for the research.

Instrument

The media dependency questionnaire consists of 15 items with three indicators of understanding, orientation, and play (Ball-Rokeach & Defleur, 1976). Questionnaire *self-efficacy* consists of 11 items with 3 indicators, namely magnitude, generality, and strength (Bandura, 1997). The Mother's Ability to Care for Children Who Experience Anxiety questionnaire consists of 15 items with 3 indicators for minimizing children's anxiety, namely minimizing separation, minimizing fear, and minimizing loss of control.

Research location

The research was conducted at the NTB Provincial General Hospital and Mataram City Hospital from December 2023 to May 2024.

Data Analysis

Descriptive Analysis

The collected data was analyzed using SPSS ver.25.0. Descriptive statistics, including frequencies, means, and standard deviations, were calculated for the study variables. The relationship between demographic variables (age, employment, and education), self-efficacy, media dependence, and the mother's ability to care for children with anxiety (KIMAC) was calculated using bivariate correlation (table 2).

Regression analysis

Regression analysis is used to explain KIMAC from demographic variables (age, employment, and education), self-efficacy and media dependence. Demographic variables (age, employment, and education) that were significantly correlated with KIM in the bivariate analysis were then included in the regression analysis. Therefore, age, occupation, and education are entered in Step 1. Meanwhile, self-efficacy and media dependence are entered in Step 2.

Mediation analysis

Baron and Kenny's (1986) casual mediation analysis process was used to examine the mediating effect of media dependence on the relationship between self-efficacy and mothers' ability to care for children with anxiety (KIMAC). Mediation analysis was carried out using the following three steps as proposed by Baron and Kenny (1986): (1) regressing the mediator (media dependence) on the independent variable (self-efficacy); (2) regressing the dependent variable (KIM) on the independent variable (self efficacy); and (3) regressing KIM on self-efficacy and media dependence to see whether the mediator still influences KIM when self-efficacy is controlled.

Results

Descriptive analysis

The distribution of respondents based on age, occupation, education, self-efficacy, media dependency, and kIMAC can be seen in Table 1.

Table 1. Distribution of research respondents (N=132)

No	Indicator	Category	Frequency (People)	Percentage (%)	Mean
1	Age	a. 16-25 years	0	0%	
		b. 26-35 years old	68	52%	
		c. 36-45 years old	64	48%	

No	Indicator	Category	Frequency (People)	Percentage (%)	Mean
		d.46-55 years old	0	0%	
2	Work	a. Work	35	27%	
		b. Not working	97	73%	
3	Education	a. Elementary School Graduation	0	0%	
		b. Graduated from junior high school	44	33%	
		c. High School Graduation	88	67%	
		d. University Graduation	0	0%	
4	Self efficacy	Keep	68	51%	2.48
		Low	64	49%	
5	Dependency Media	Keep	35	26%	2.73
		Low	97	74%	
6	KIMAC	Keep	43	32%	2.67
		Low	89	68%	

Based on table 1, it can be seen that the majority of mothers are in the 26-35 year age range, 52%, 73% of mothers do not work, 67% of mothers have completed high school education. Apart from that, 51% of mothers have self-efficacy in the medium category, 74% of mothers have media dependence in the low category, and 68% of mothers can care for children who experience low category of anxiety.

Table 2. Correlation between research variables

	Variable	1	2	3	4	5
1	KIMAC	-				
2	Age	.630***	-			
3	Work	.864***	.532***	-		
4	Education	.743***	.482***	.849***	-	
5	Self efficacy	.674***	.970***	.583***	.525***	-
6	Dependency media	.461***	.257***	.533***	.595***	.308***

*p < 0.05.
**p < 0.01.
***p < 0.001.

Based on table 2, it can be seen that there is a significant relationship between KIMAC and age (r = 0.630, p < 0.01), employment (r = 0.864, p < 0.01), education (r = 0.743, p < 0.01), self-efficacy (r = 0.674, p < 0.01), media dependency (r = 0.461, p < 0.01).

Regression analysis

Demographic variables (age, occupation, and education) explain around 78% of the KIMAC variables (R2 = 0.787, p < 0.01). The self-efficacy and media dependency variables explain 52% of the KIMAC variable (R2 = 0.526, p < 0.001). All independent variables,

namely demographic variables (age, occupation, and education), self-efficacy, and media dependency explain 79% of the KIMAC variable (R2 = 0.791, p < 0.001). In the final model, only the employment variable (β=0.710, p < 0.001, 95% CI (0.583, 0.926)) contributed significantly to KIMAC (table 3).

Table 3. Regression analysis of demographic variables, self-efficacy and media dependency on KIMAC

Variable predictor	Model 1			Model 2		
	B	B	95% CI	B	B	95% CI
Age	0.223***	0.238***	(0.133, 3.12)	0.000	0.000	(-0.318, 0.319)
Work	0.778***	0.733***	(0.610, 0,946)	0.754***	0.710***	(0.583, 0.926)
Education	0.006	0.006	(-0.146, 0,158)	0.003	0.003	(-0.157, 0.164)
Self efficacy				0.242	0.258	(-0.090, 0.573)
Media dependence				0.001	0.001	(-0.107, 0.109)
R2	0.787			0.791		
R2 change	0.787			0.791		
F statistics	158.071***			95.353***		

*p < 0.05.
**p < 0.01.
***p < 0.001.

Mediation Analysis

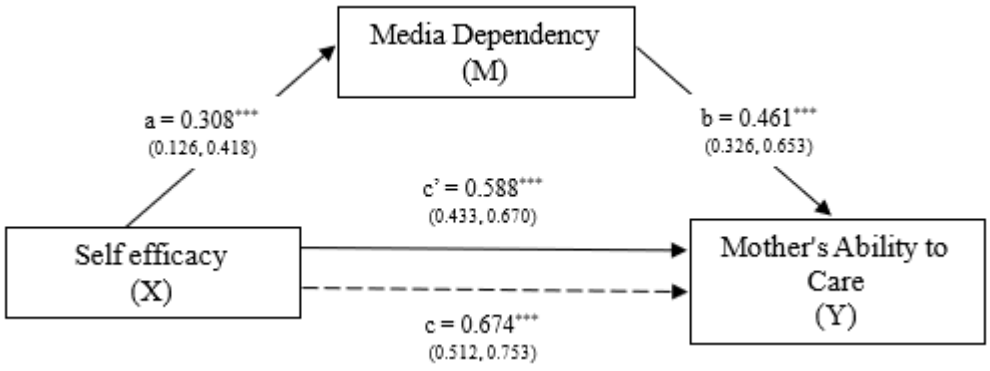

Figure 1. Path coefficient of mediation test

As seen in Figure 1, the standardized regression coefficient between self-efficacy and KIMAC shows a significant positive result (β=0.674, p < 0.001, 95% CI [0.512, 0.753]; path c). Path 'a' shows a significant positive relationship between self-efficacy and media dependency (β=0.308, p < 0.001, 95% CI [0.126, 0.418]). Path 'b' shows that media dependency

contributes significantly to KIMAC after controlling for self-efficacy (β=0.461, p < 0.001, 95% CI [0.326, 0.653]). The standardized coefficient between self-efficacy and KIMAC decreases when controlling for media dependency (β=0.588, p < 0.001, 95% CI [0.433, 0.670]; path c'). This shows that media dependency partially mediates the relationship between self-efficacy and KIMAC.

Discussion

The results of the regression analysis show that self-efficacy and media dependency contribute significantly to the mother's ability to care for children who experience hospitalization anxiety. This indicates that mothers who have higher self-efficacy and media dependency have the ability to care for children who experience anxiety better. Someone who has higher self-efficacy will have higher confidence in their ability to deal with stressors (Bandura, 1998). High self-confidence in the mother has an impact on optimal care given by the mother to the child during hospitalization (Fenti et al., 2022). Self-efficacy in caring has been identified as an important factor influencing caregivers' ability to cope with the burden of caring and improve patient outcomes (Leung et al., 2020). Study results show that dependence on media influences a person's health commitment and behavior (Moreno et al., 2023; Karmokar at al., 2021). Media, especially content related to education and health, has been proven to significantly increase mothers' behavior in caring for children who experience health problems (Putri et al., 2021).

The results of the mediation analysis show that self-efficacy significantly contributes to media dependency and the mother's ability to care for children who experience anxiety. More than that, self-efficacy indirectly influences the mother's ability to care for children who experience anxiety through media dependency. This shows that mothers who have high self-efficacy will tend to have high media dependence and this is further related to the mother's ability to care for children who experience anxiety better. Media dependence has a positive effect on self-efficacy, which can then mediate prosocial behavior (Gong J et al, 2022). Media can effectively increase individuals' confidence in their ability to perform certain health-related actions (Daniel et al., 2023).

Conclusion

The results of this study show self-efficacy and media dependency explain 52% of mothers' ability to care for children who experience hospitalization anxiety after controlling for demographic variables (age, occupation, and education). In the mediation analysis, media dependency partially mediates the relationship between self-efficacy and the mother's ability to care for children who experience hospitalization anxiety.

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