

Jurnal Aisyah: Jurnal Ilmu Kesehatan

Volume 7, Issue 1, March 2022, p. 75–84 ISSN 2502-4825 (print), ISSN 2502-9495 (online)

A SEM-PLS Model Analysis: The Relationship of Health Promotion Model Components and Personal Hygiene Behavior to Prevent Scabies in Prisoners

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ARTICLE INFO

Article history:

Keyword:

Scabies

Prisoner SEM-PLS

Received 11 December 2021

Accepted 21 February 2022

Published 10 March 2022

Health promotion model

Personal hygiene

ABSTRACT

The full condition of prisons and the lack of health service facilities can affect prisoners' health conditions. In order to maintain their health condition, it is necessary to take preventive measures, one of which is the application of good personal hygiene. In improving the compliance of prisoners in improving their health status, it is vital to perform health promotion following the theory of the Health Promotion Model (HPM). The study aimed to identify and determine the relationship between components in the Health Promotion Model and Personal Hygiene behavior in preventing scabies in prisoners. The study utilized a cross-sectional design. The study samples were all prisoners in the Penitentiary Class IIB Mojokerto, amounting to 284 respondents, and data were collected by purposive sampling technique. Data analysis in this study used the SEM-PLS technique, with three stages of analysis: 1.) outer model test, in the form of reflective and formative models, to determine the relationship between indicators and latent variables; 2.) inner model test, consisting of R-squared test (R2), effect size (f2), predictive prevalence (Q2), and Goodness of Fit test. The inner model test aims to determine the relationship between latent variables; and 3.) hypothesis testing to observe the significance value of the effect of exogenous variables on endogenous variables through the Tstatistical value (> 1.96) and p-value (< 0.05). A total of 284 respondents met the criteria for conducting data analysis.

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Kata kunci:

Health promotion model Personal hygiene Skabies Narapidana SEM-PLS

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DOI: 10.30604/jika.v7i1.786

A B S T R A K

Penuhnya kondisi Lembaga Pemasyarakatan dan minimnya saranaprasarana layanan kesehatan dapat mempengaruhi kondisi kesehatan Narapidana. Agar tetap terjaga kondisi kesehatannya maka perlu adanya tindakan preventif, salah satunya dengan penerapan personal hygiene yang baik. Untuk meningkatkan kepatuhan Narapidana dalam meningkatkan derajat kesehatan mereka perlu dilakukan promosi kesehatan, sesuai dengan teori Health Promotion Model (HPM). Tujuan penelitian untuk mengidentifikasi dan menentukan hubungan antar komponen dalam Health Promotion Model dengan perilaku Personal Hygiene dalam pencegahan skabies pada Narapidana. Desain penelitian menggunakan desain cross sectional. Sampel pada penelitian ini adalah seluruh narapidana di Lembaga Pemasyarakatan Kelas IIB Mojokerto sebanyak 284 responden, pengambilan data dengan teknik Purposive Sampling. Analisis data pada penelitian ini menggunakan teknik SEM-PLS, dimana terdapat tiga tahapan analisa yaitu: 1.) uji outer model, berupa model reflektif dan formatif, untuk mengetahui hubungan indikator dengan variabel latennya; 2.) uji inner model, yang terdiri dari uji R-squared (R2), effect size (f2), predictive prevalence (Q2), dan uji Goodness of Fit. Uji inner model bertujuan untuk mengetahui hubungan antar variabel laten; dan 3.) uji hipotesis, bertujuan untuk melihat nilai signifikansi pengaruh variabel

eksogen pada variabel endogen yang dilihat melalui nilai T-statisic (>1,96), dan p-value (<0,05). Sebanyak 284 responden memenuhi kriteria untuk dilakukan analisa data.

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INTRODUCTION

A penitentiary is a place to implement the development of prisoners in prison in Indonesia. Besides functioning as a place of guidance for prisoners, a penitentiary also provides a place for health services for prisoners. Health services for prisoners are one of the supporting factors of the Physical and Spiritual Development Program for prisoners in a penitentiary. A prisoner has the same right to receive optimal health degrees (Siswanto, 2015).

Health problems in prisons are thought to be due to several factors, including excess capacity, increasing the risk of infectious diseases, delays in disease detection, lack of isolation rooms, and inappropriate treatment. On the other hand, the conditions of the facilities and health workers are not optimal. Ninety-five percent of prisoners living in prisons often suffer from skin diseases, respiratory disorders, infectious diseases, infectious diseases, digestive tract diseases, cardiovascular diseases, and sexually transmitted diseases (Lima, 2016).

Data on the morbidity rate of prisoners at the Penitentiary Class IIB Mojokerto in the last three months of 2021 shows a disease with the highest number of cases, i.e., Scabies, for 773 cases with an average of 230 (30%) cases per month from 1061 prisoners. A total of 36.5% of people with skin diseases are caused by limited access when drying clothes, mattresses, and bed linen that were rarely even changed. Hence, contamination and exposure are hardly prevented. The full conditions of prisons and the lack of health service facilities can affect prisoners' health conditions (Prison morbidity data, 2021).

In maintaining their health condition and avoiding disease, it is vital to take a preventive measure, i.e., good personal hygiene. Personal hygiene is a step to take care of oneself, which is crucial to maintain health. Taking care of oneself is essential since good personal hygiene will minimize microorganisms' entrance (port de entry), preventing someone from getting sick. In improving the compliance of prisoners in improving their health status, health promotion is required. Health promotion includes behavioral aspects: efforts to motivate, encourage, and raise awareness of the potential possessed by prisoners so that they can maintain and improve their health (Potter & Perri, 2005).

According to Pender (2011), the role of nurses or health workers in prisons is to prevent scabies from getting worse by inviting individuals and the role of the environment to behave positively towards health maintenance and improvement, increasing motivation and commitment of prisoners to maintain personal hygiene behavior in preventing scabies at the Penitentiary Class IIB Mojokerto. A good understanding of how a person behaves in health is needed to optimize health promotion efforts. The Health Promotion Model (HPM) is based on three components: experience and individual characteristics, behavior based on attitudes, and cognitive and health promotion behavior. The three components in the HPM theory can influence an individual's health behavior. The first component of the Health Promotion Model (HPM) theory is that individual health behavior can be influenced by individual experiences and characteristics (Pender, 2011). Past experiences can influence a person's behavior either directly or indirectly. Moreover, personal factors are general characteristics affecting health behavior, such as age, race, ethnicity, and socioeconomic status (Pender, 2011). The second component of the Health Promotion Model (HPM) theory is behavior based on cognitive and affective (Pender, 2011). Cognitive factors that can influence individual health behavior are health behavior formed after individuals feel the benefits of their health behavior, overcome obstacles to perform health behaviors, have self-efficacy for healthy behavior, and feel the benefits from before, during, and after performing the health behavior. In addition, there are effective factors that can influence individual health behavior, such as interpersonal and situational factors. The third component of the Health Promotion Model (HPM) theory is health promotion behavior, which results from the preparation and decision-making process for health promotion behavior (Pender, 2011).

METHOD

Study Design

The study employed a cross-sectional design. A crosssectional approach in this study aimed to measure the relationship between the components of the Health Promotion Model and Personal Hygiene behavior to prevent scabies in prisoners. The components of the Health Promotion Model measured in this study were behavior before and after staying in prison, perceived benefits, perceived barriers, self-efficacy, attitudes related to activities, interpersonal influence, and action commitment. These components were measured to determine a relationship between the components of the Health Promotion Model on Personal Hygiene behavior to prevent scabies in prisoners. In addition, a measurement of the relationship between the existing factors was also carried out.

Population and Sample

The study population was all 1061 prisoners in the Penitentiary Class IIB Mojokerto. The samples required in this study were 284 respondents, with a data collection using the purposive sampling technique since respondents taking part in the study only carried out examinations at the correctional clinic.

Data Collection Technique

Data collection was carried out with the help of facilitators, i.e., correctional officers, to help provide questionnaires to prisoners when they checked into health clinics in the penitentiary. Filling out the questionnaire was performed immediately when the prisoner finished checking for a maximum of 15 minutes since it is impossible to fill out the questionnaire in the cell. Thus, it was performed when the prisoner carried out activities without violating the legal aspects of nursing ethics. After the data were collected, the researcher began the editing, coding, and data entry processes.

Data Analysis

Data analysis in this study used the SEM-PLS technique, with three stages of analysis: 1.) outer model test, in the form of reflective and formative models, to determine the relationship between indicators and latent variables; 2.) inner model test, consisting of R-squared test (R2), effect size (f2), predictive prevalence (Q2), and Goodness of Fit test. The inner model test aims to determine the relationship between latent variables; and 3.) hypothesis testing to observe the significance value of the effect of exogenous variables on endogenous variables through the T-statistical value (> 1.96) and p-value (<0.05). A total of 284 respondents met the criteria for conducting data analysis.

RESULTS AND DISCUSSION

The table 1 shows that the most age group of respondents participating in this study was 20-30 years (51.8%). In the characteristics of respondents based on the latest education, the majority of respondents' last education was High School Graduate with a percentage of 47.5%. In terms of detention duration, most respondents have lived in the penitentiary for one year (40.8%). In the characteristics of respondents based on cells, most respondents' occupancy rooms are in the detention block (60.6%). Based on the characteristics of

Tabel 2. SEM-PLS Analysis Result

having experienced scabies while living in the penitentiary, most had experienced scabies (72.2%). Based on the characteristics of whether they were experiencing scabies when participating in the study, most respondents did not experience scabies, amounting 216 respondents (76.1%).

Table 1 characteristics of respondents (N=284)

	-	
Age Range	Frequency	Percentage
20-30 years	147	51.8%
31-40 years	93	32,7%
41-50 years	28	9,9%
51-60 years	16	5,6%
Education		
No school	7	2,5%
Primary School Graduates	34	12%
Middle School Graduate	102	36.3%
High School Graduate	134	47,5%
Do Not Finish Higher Education	5	1,8%
Detention Duration		
3 months	12	4,2%
6 months	43	15,1%
1 years	116	40,8%
1,5 years	73	25,7%
>2 years	40	14,1%
Cell		
Prison Block	112	39,4%
Detention Block	172	60,6
Ever experiencing scabies		
Yes	205	72,2%
No	79	27,8%
Is experiencing scabies		
Yes	68	23,9%
No	216	76,1%

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Behavior before living in the penitentiary (X1)	0,640	0,674	0,783*	0,477
Perceived benefits (X2)		1,000*		
Perceived barriers (X3)		1,000*		
Self-Efficacy (X4)		1,000*		
Attitude related to activities (X5)	0,909*	0,974*	0,907*	0,496
Behavior after living in the penitentiary (Y1)	0,817*	0,835*	0,915*	0,844*
Action Commitment (Y2)	0,905*	0,912*	0,923*	0,574*
Interpersonal Influence (X6)		1,000*		

There was an increase in the value of Cronbach alpha and composite reliability on behavior before living in the penitentiary (X1). Also, there was a change in the reflective variable in this study model showing the AVE value > 0.5, i.e., the behavior after living in the penitentiary (Y2) and action commitment (Y) variables. It shows that eliminating indicators failing to meet the standard loading factor value affected the AVE value and composite reliability on behavior before living in the penitentiary. Before staying in the penitentiary, all indicators show a higher cross-loading value than other construct indicators. In the behavior before living in the penitentiary variable, there was a change in the crossloading value after re-analysis. However, the cross-loading value of the four variables still met the criteria to be a valid indicator. That is, the cross-loading value is greater than the other construct indicators. All indicators on the attitude related to activities show a higher cross-loading value than other construct indicators. However, there was one indicator,

i.e., (X.5.1). In the attitude variable related to activities, there was a change in the cross-loading value after re-analysis. However, the cross-loading value of the nine variables still met the criteria to be a valid indicator. That is, the crossloading value is greater than the other construct indicators. All indicators on behavior after living in the penitentiary show a higher cross-loading value than other construct indicators. In the behavior after living in the penitentiary, there was a change in the cross-loading value after reanalysis. However, the cross-loading value of the two variables still met the criteria to be a valid indicator. That is, the cross-loading value is greater than the other construct indicators. The discriminant validity test after eliminating four behavioral variable items before staying in the penitentiary did not affect the cross-loading value of the attitude variable related to activities. However, the elimination affected the cross-loading value of the behavior after living in the penitentiary. The action commitment revealed that the overall value of the cross-loading indicator

is higher than other constructs.

Tabel 3.	
Outer Weight Test	t

Variable	Indicator	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Perceived benefits	X.2.1 -> X2	1,081	1,075	0,111	9,706	0,000*
	X.2.2 -> X2	-0,551	-0,552	0,083	6,625	0,000*
	X.2.3 -> X2	0,218	0,217	0,097	2,249	0,025*
	X.2.6 -> X2	-0,197	-0,194	0,088	2,248	0,025*
	X.2.7 -> X2	-0,155	-0,153	0,074	2,083	0,038*
	X.2.10->X2	0,182	0,183	0,081	2,240	0,026*
Perceived barriers	X.3.2 -> X3	1,000	1,000	0,000		
Self-efficacy	X.4.2 -> X4	0,278	0,276	0,067	4,165	0,000*
	X.4.3 -> X4	0,513	0,509	0,063	8,134	0,000*
	X.4.4 -> X4	0,434	0,430	0,055	7,947	0,000*
	X.4.5 -> X4	0,198	0,194	0,049	4,037	0,000*
	X.4.6 -> X4	-0,285	-0,281	0,087	3,281	0,001*
	X.4.8 -> X4	-0,164	-0,166	0,070	2,340	0,020*
Interpersonal	X.6.6 -> X6	0,336	0,323	0,083	4,071	0,000*
influence	X.6.8 -> X6	0,438	0,444	0,112	3,916	0,000*
	X.6.10->X6	0,456	0,450	0,083	5,520	0,000*

The analysis results of the perceived benefits indicators were all valid with a range of T-statistic values from 2.083-9.706. It shows that the construct explained the perceived benefits. The T-statistic value of the perceived barrier indicators from the results of the outer weight analysis after the revision only had one valid item. The perceived barrier indicator could not describe behavior after living in the penitentiary and action commitment, i.e., prisoners can bathe twice a day, change bed linen every two weeks, and dry their bedding every one week. All indicators making up interpersonal factors were declared valid (T statistic>1.96); p-value < 0.05).

	Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
H1	Behavior befor -> Behavior after	0,436	0,437	0,046	9,380	0,000*
H2	Behavior before -> Action commitment	-0,029	-0,030	0,041	0,701	0,483
H3	Perceived benefits -> behavior after	0,531	0,530	0,039	13,738	0,000*
H4	Perceived benefits -> action commitment	0,080	0,080	0,029	2,781	0,006*
H5	Perceived barriers -> behavior after	0,103	0,104	0,033	3,146	0,002*
H6	Perceived barriers -> action commitment	0,166	0,156	0,036	4,633	0,000*
H7	Self-efficacy -> behavior after	0,022	0,021	0,050	0,452	0,651
H8	Self-efficacy -> action commitment	0,442	0,433	0,068	6,477	0,000*
H9	Attitude related to activities -> behavior after	-0,144	-0,141	0,034	4,254	0,000*
H10	Attitude related to activities -> action commitment	0,111	0,107	0,022	5,010	0,000*
H11	Interpersonal influence -> behavior after	0,016	0,017	0,049	0,321	0,748
H12	Interpersonal influence -> action commitment	0,415	0,433	0,072	5,783	0,000*

Inner Model Test

The results of the inner model analysis consist of 1.) R-squared value (0.828; 0.836.); 2) the effect size value showing a strong influence was on the behavior after living in the penitentiary variable f2 on perceived benefits (0.994) and behavior before living in the penitentiary (0.611); 3) predictive prevalence (0.971); and 4.) The goodness of Fit

behavior after living in the penitentiary (0.835) and action commitment (0.692). The five most substantial relationships between independent variables show significant results (p<0.01), i.e., the relationship between behavior before living in the penitentiary, perceived benefits, perceived barriers, attitude related to activities, and behavior after living in the penitentiary. Perceived benefits, perceived barriers, selfefficacy, attitude related to activities, interpersonal influence had a significant direct relationship to action commitment (p<0.05). Self-efficacy and interpersonal influence demonstrated an insignificant relationship to behavior after living in the penitentiary. The model in this study influenced 82.8% and 83.6% on behavior after living in the penitentiary and action commitment, and the remaining was by other factors excluded from the study.

Hypothesis Test

Hypothesis testing was conducted by analyzing the path coefficient data processing results on the evaluation of the structural model. In this study, the significance value of the p-value used was 0.05; hence, the t table value was 1.96. If the data processing results show a value meeting this requirement, then the hypothesis proposed in this study is accepted, and vice versa.

DISCUSSION

The relationship between behavior before living in the penitentiary and behavior after living in the penitentiary

The study discovered that the behavior before living in the penitentiary significantly influenced behavior after living in the penitentiary (T-statistic > 1.96; p-value <0.05). The frequency of similar behavior in the past has direct and indirect effects on the likelihood of engaging in healthpromoting behavior (Alligood, 2014). The direct effect of past behavior on current health-promoting behavior may be due to habit formation, which automatically predisposes a person to engage in the behavior (Pender, 2016).

The relationship between behavior before living in the penitentiary and action commitment

In this study, behavior before living in the penitentiary did not significantly affect action commitment because the T-statistic value is smaller than the t-table value (T-statistic 0.483; p-value > 0.05. Past behavior was direct and indirect behavior often carried out in the past, impacting the possibility of behavior that improves health status. The more the behavior was often carried out in the past, the behavior will also affect the actions taken in the future (Anita, 2017). A prisoner must have perceptions, attitudes, and commitments of the need to change to better personal hygiene behavior change (Rahmania, 2015). Commitment to planning action is a specific strategy to obtain, implement or strengthen behavior (Pender, 2002).

The relationship between perceived benefits and behavior after living in the penitentiary

The analysis results in this study indicate that perceived benefits had a significant effect on behavior after living in the penitentiary with a t-table value of 13.738 (p-value 0.01). Prisoners who have a perception of the benefits of personal hygiene behavior can improve the ability of prisoners in terms of prevention, health improvement, and recovery of the health of prisoners during their stay in prisons. Perceptions of the benefits felt by prisoners are perceptions of the benefits or advantages of each individual to carry out health behavior and improve personal hygiene behavior in correctional institutions. The benefits of this action will directly motivate prisoners' behavior and will indirectly determine what prisoners will carry out activity plans to achieve benefits as a result.

The relationship between perceived benefits and action commitment

In this study, the results of the analysis based on the path coefficient results indicate that the perceived benefits had a significant effect on action commitment, where the results of the t-table value (T-statistic> 1.96; p-value <0.05) are the results of the t-statistic 2.782>1 .96 and p-value 0.006 <0.05. Prisoner tries to create conditions for survival in which they can express their uniqueness. Prisoners also can reflect on their self-awareness to actively try to regulate their behavior. A prisoner must have a good perception of the benefits of action and must be smart to adapt to new situations, atmosphere, and environment to maintain and improve optimal health status during his stay in a correctional institution. Action commitment to prisoners is vital for changing the behavior of prisoners in prisons

The relationship between perceived barriers and behavior after living in the penitentiary

In this study, based on the results of path research on perceived barriers to behavior after living in the penitentiary, it was discovered that it had a significant effect with the t-statistic value greater than the t-table value (T-statistic> 1.96; p value <0.05). Prisoners feel they have obstacles or obstacles to maintain personal hygiene behavior when they live in correctional institutions. These barriers consist of perceptions of unavailability or difficulty in terms of facilities, costs, time, or things that are felt to be unpleasant. Every prisoner has a desire, habit, or personal preference to use certain products to maintain their personal hygiene, such as shampoo, soap, and others.

The relationship between perceived barriers and action commitment

In this study, based on the results of the path coefficient on perceived barriers to action commitment, it had a significant effect with the t-statistic value greater than the ttable value (T-statistic> 1.96; p-value <0.05). Perceived barriers are an awareness of the barriers to action that can cause health problems related to health behavior. A person's awareness of health and health promotion behavior can be hampered due to the lack of willingness and commitment from oneself, so that it will also have an impact on a person's ability to maintain their health status (Ribka, 2019). Perceived barriers or perceived by prisoners greatly affect their intention or commitment to behave positively in performing personal hygiene behavior to prevent scabies (Rahmania, 2015). High barriers, then the action or behavior will not be realized. On the contrary, if the readiness to act is high and the barriers are low, the action will likely be carried out (Tomey & Aligood, 2006).

The relationship between self-efficacy and behavior after living in the penitentiary

In this study, self-efficacy did not significantly affect behavior after living in the penitentiary, where the t-statistic value is smaller than the t-table value (T-statistic <1.96; p value>0.05). A prisoner with low self-efficacy will tend to doubt their abilities. They will stay away from the tasks, directions, and orders given because they feel that these tasks are seen as a threat to them. When faced with challenging tasks, they are busy thinking about their shortcomings, the distractions they face, and all the outcomes that could harm them. In doing a task, individuals with low self-efficacy tend to avoid it and cannot carry out good personal hygiene behavior when they live in the penitentiary.

The relationship between self-efficacy and action commitment

The results of this study indicate that self-efficacy had a significant effect on action commitment (T-statistic > 1.96; p-value <0.05). Self-efficacy motivates health-promoting behavior directly by expected efficacy and indirectly by influencing perceived barriers and levels of commitment or persistence in pursuing a plan of action (Pender et al., 2016). Self-efficacy motivates health promotion behavior directly with efficacy expectations and indirectly by influencing barriers and commitments in implementing action plans (Bandura, 2011)

The relationship between attitude related to activities dengan behavior after living in the penitentiary

Based on the results of the path coefficient on attitude related to activities on behavior after living in the penitentiary, there was a significant effect with the t-statistic value greater than the t-table value (T-statistic> 1.96; pvalue <0.05) where the results obtained are (T-statistic 4.254> 1.96; p-value 0.000 <0.05). The resulting attitude describes positive and negative feelings before, during, and subsequent behavior based on a stimulus that causes an attitude response and influences behavior (Azwar 2010). The attitude of prisoners is reflected in the process of receiving, responding, and appreciating the importance of maintaining and improve personal hygiene behavior in prisons to prevent the risk of contracting scabies disease. Prisoners are more accepting of the importance of personal hygiene behavior, motivating themselves to have a healthier lifestyle in preventing scabies, and being concerned about preventing scabies. Hence, a positive attitude produces good behavior marked by reducing the risk factors for scabies disease with good personal hygiene behavior.

The relationship between attitude related to activities and action commitment

In this study, based on the results of the path coefficient value on attitude related to activities towards action commitment, the results obtained (t-statistic 5.010> 1.96; pvalue 0.000 <0.05), concluding that attitude related to activities had a strong influence on action commitment. Attitude plays a role in determining commitment to improving health status. However, it does not mean that a positive attitude will always have an exemplary commitment since attitude is not an action (open reaction) or activity but is a behavioral predisposition or closed reaction. (Sembiring, 2010). The feelings or attitudes produced by prisoners are likely to influence whether they will repeat or maintain the old behavior. Therefore, a prisoner needs to have an action commitment to maintaining personal hygiene behavior during their stay in the penitentiary

The relationship between interpersonal influence and behavior after living in the penitentiary

Based on the results of the path coefficient in this study, it was found that interpersonal influence had no significant effect on behavior after living in the penitentiary. From the analysis results, the t-statistic value is smaller than the ttable value (t-statistic 0.321<1.96; p-value 0.748>0.05). Interpersonal influence influences health promotion behavior directly or indirectly through social pressure or encouragement to commit to an action plan (Pender, 2011). Interpersonal influence (interpersonal factor) is one of the factors in improving health behavior for prisoners that can produce behavior, beliefs, and attitudes. The main sources of interpersonal factors in improving health behavior in prisoners are family (parents and siblings), friends, correctional officers, and health workers. The existence of social support affects the realization of health improvement behavior.

The relationship between interpersonal influence and action commitment

The study results based on the path coefficient indicate a significant influence between interpersonal influence on action commitment in prisoners. The results obtained that the t-statistic value is greater than the t-table value (t-statistic 5.783> 1.96; p-value 0.000 <0.05). Interpersonal influence is cognition about the behavior, beliefs, or attitudes of others. The main sources of interpersonal influence are family (sibling peer) and health service influencers (Pender, 2011). This study is in line with other studies where the study results showed a significant influence between interpersonal influence consists of norms (expectations of others), social support (instrumental and emotional encouragement), and models of learning from the experiences of others (Pender, 2011).

CONCLUSION

Based on the results of the analysis of the SEM-PLS model performed by researchers using 284 respondents in the Penitentiary Class IIB Mojokerto as the study subjects, there was a relationship between behavior before living in the penitentiary and behavior after living in the penitentiary with a value of t table (T statistic > 1.96; p-value < 0.05). There was no relationship between behavior before staying in the penitentiary on action commitment with the t table value (T statistic < 1.96; p-value > 0.05), and there was a relationship between benefits perceived behavior after living in the penitentiary with t table value (T statistic> 1.96; pvalue <0.05). There was a relationship between the perceived benefits of action commitment and the t table value (T statistic> 1.96; p-value <0.05), a relationship between perceived barriers to behavior after living in the penitentiary with the value of t table (T static tic>1.96; p-value <0.05), and a relationship between perceived barriers to action commitment with the value of t table (T statistic> 1.96: pvalue <0.05). There was no relationship between self-efficacy and behavior after living in the penitentiary with t table value (T statistic < 1.96; p-value > 0.05). There was a relationship between self-efficacy and action commitment with t table value (T statistic> 1, 96; p-value <0.05), a relationship between attitude related to activities and

behavior after living in the penitentiary with t table value (T statistic> 1.96; p-value <0.05), and a relationship between attitude related to activities and action commitment with t table (T statistic> 1.96; p-value <0.05). There was no relationship between interpersonal influence and behavior after living in the penitentiary with t table value (T statistic <1.96; p-value > 0.05), and there was a relationship between interpersonal influence and action commitment with t table value (T statistic>1.96; p-value <0.05).

Acknowledgment

The authors are thankful for the support from Master Program of Nursing, Faculty of Medicine, Universitas Brawijaya, Malang Indonesia.

ETHICAL CONSIDERATIONS

This study was conducted in accordance with research ethical standards and all research protocols have received ethical approval from the research ethics committee of the Faculty of Medicine, Brawijaya University with number 205/EC/KEPK-S2/07/2021

Funding Statement.

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors

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