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Path Analysis of the Influence of the Theory of Planned Behavior Construct on Visual Inspection of Acetic Acid Uptake in Banjarnegara

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ABSTRACT

Background: The death rate for women of childbearing age is increasing. This indicates the need for useful interventions to prevent deaths from cervical cancer. One way is to carry out an Acetic Acid Visual Inspection (VIA) screening. Unfortunately, the rate of VIA screening is still low. So it is necessary to conduct research on how the behavior of using VIA screening is viewed from health promotion theory. This study aimed to determine the application of one of the health promotion theories, namely the Theory of Planned Behavior (TPB), to the use of VIA screening in Banjarnegara Regency.
Subjects and Method: The study was conducted with a cross-sectional study design involving 200 female participants of reproductive age ranging from 20 to 50 years. This research was conducted in Banjarnegara Regency, Central Java Province, Indonesia. This study was conducted in April-May 2024. The sample was selected using fixed disease sampling to find participants who had undergone VIA screening. Data collection was carried out using questionnaires and data was analyzed using univariate, bivariate and path analysis.
Results: The results of this study showed that the behavior of using VIA screening was directly influenced by intentions and perceived behavioral control. The possibility of subjects to undergo VIA screening can increase by strong intentions (OR= 6.56; 95% CI= 2.97 to 14.48; p< 0.001) and high perceived behavioral control (OR= 6.23; 95% CI= 3.07 to 12.65; p < 0.001). In addition, the results of path analysis showed that intentions were influenced by attitudes (OR= 2.73; 95% CI= 1.31 to 5.69; p= 0.007), subjective norms (OR= 3.48; 95% CI= 1.71 to 7.07; p= 0.001), and perceived control treatment (OR= 3.03; 95% CI= 1.50 to 6.09; p= 0.002).
Conclusion: The use of VIA screening is directly influenced by intention and perceived behavioral control. In addition, intentions are influenced by attitudes, subjective norms, and perceived behavioral control. All results of the analysis are statistically significant.

Keywords: theory of planned behavior, cervical cancer screening, women of reproductive age.

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BACKGROUND

Cervical cancer is one of the biggest killers of women after breast cancer. In Indonesia, breast cancer has the highest incidence rate, namely 42.1 per 100,000 population, with a mortality rate of 17 per 100,000 population. Cervical cancer is in the next position with an incidence rate of 23.4 per 100,000 population and a mortality rate of 13.9 per 100,000 population (Enyan et al., 2022). In Brunei, cervical cancer screening and HPV vaccination programs since 2011 and 2012 have contributed to a significant reduction in mortality trends. Scaling up these programs and universal health coverage will drive the achievement of WHO targets by 2030 (Leong et al., 2023). In Sub-Saharan Africa, the prevalence of cervical cancer screening remains low, indicating the need for interventions to reduce the cancer burden, improve quality of life, and women's resilience. Factors that increase screening include sexual activity, age, health insurance coverage, socioeconomic status, education, and contraceptive use (Ba et al., 2021).

One easy and affordable screening method is visualization of the cervix by examining the acetowhite area after application of 3%-5% acetic acid and Lugol's iodine, known as IVA screening (Sary et al., 2023). In 2022, all community health centers in Banjarnegara Regency have been carried out VIA screening and clinical examinations. Of 168,454 women aged 30-50 years, only 2,667 (1.6%) underwent cervical and breast examinations. There were 20 cases (0.7%) of positive VIA, an increase from 18 cases in 2021. Cases of suspected cancer decreased to 5 cases (0.2%) from 6 cases in the previous year, while tumors or lumps increased to 27 cases (1%) from 19 cases. Cryotherapy services were performed in 10 of 20 cases (50%). Cryotherapy uses cold temperatures to kill abnormal tissue.

In accordance with one of the existing health promotion theories, human behavior is influenced by intentions. Then intention is influenced by attitude, subjective normal, and perceived behavioral control. This theory is known as the Theory of Planned Behavior (TPB). Women with negative attitudes toward cervical cancer screening were 78% less likely to undergo screening compared with those with positive attitudes. Positive attitudes correlate with regular screening use, but are influenced by subjective norms, culture, values, and lifestyle (Ilevbare et al., 2020). The TPB has been proven to be accurate in predicting health behavior (Enyan et al., 2022; Getahun et al., 2020). TPB can also predict cervical cancer screening uptake, where subjective norms, perceived behavioral control, and behavioral attitudes play an important role (Dsouza et al., 2022). The theory shows adequate internal consistency and impressive social and theoretical significance in cancer screening-related behavior (An and Vincent, 2022).

Researchers have not found the application of TPB to increase the use of VIA screening in Banjarnegara Regency. Existing research only focuses on quantitative descriptive analysis regarding the perceptions of women of reproductive age regarding the use of VIA screening (Ningrum, 2019). Previous research has analyzed the factors that influence women of reproductive age in undergoing VIA screening, such as support from husbands, support from health workers, age, level of education, and access to information (Destriani et al., 2022; Enyan et al., 2022; Komalawati and Martha, 2023). Therefore, this study aims to determine the influence of attitudes, subjective norms, perceived behavioral control, and intentions on the use of VIA screening for early detection of cervical cancer among

women of reproductive age in Banjarnegara Regency.

SUBJECTS AND METHOD

1. Study Design

This study used a cross-sectional design or what is commonly known as a cross-sectional design, an observational research design in which researchers measure outcomes and exposure in a population at the same time, without changing exposure status. This research was conducted in Banjarnegara Regency, Central Java Province, Indonesia. The research was be carried out in April-May 2024.

2. Population and Sample

The population of this study consisted of women of reproductive age ranging from 20 to 50 years who had or had never participated in VIA screening in Banjarnegara Regency. The research sample consisted of 200 participants. The sampling method used was fixed disease sampling. In a cross-sectional context, a group of subjects was selected from a specific population and assessed for the presence or absence of a desired attribute at a specific time.

3. Study Variables

The dependent variable was the behavior of using VIA screening. The independent variables were attitudes toward behavior, subjective norms, perceived behavioral control and behavioral intentions.

4. Operational Definition of Variables

Behavior of VIA screening: A behavior to use medical procedures with acetic acid to detect abnormal changes in the cervix which can be an early sign of cervical cancer. Data was collected using questions with dichotomous data.

Attitude towards behavior: Positive or negative assessment of the use of VIA screening. Data was collected through questionnaires using a continuous scale and then converted into dichotomous data for data analysis purposes.

Subjective norm: Women of reproductive age's beliefs about other people's expectations can influence women of reproductive age's decision to use VIA screening. Data was collected through questionnaires using a continuous scale and then converted into dichotomous data for data analysis purposes

Perceived behavioral control: Women of reproductive age's beliefs regarding supporting or inhibiting factors for using VIA screening. Data was collected through questionnaires using a continuous scale and then converted into dichotomous data for data analysis purposes.

Behavioral intention: the tendency of women of reproductive age to use or not use VIA screening. Data was collected through questionnaires using a continuous scale and then converted into dichotomous data for data analysis purposes.

5. Study Instruments

The research instrument used for data collection is using questionnaires.

6. Data analysis

Univariate analysis aims to identify the frequency and percentage distribution. Bivariate analysis was then carried out to explore the conceptual influence of Integrated health center on the quality of life of the elderly for each exogenous variable. Next, path analysis was carried out, namely a statistical technique for testing the relationship between a group of variables. It can describe direct relationships between variables or indirect relationships through other variables. Path analysis was carried out with dichotomous data and used the Generalized Structural Equation Model (GSEM) where there were no assumptions that must be met as in linear regression analysis. GSEM also

suitable for analyzing variables with dichotomous data.

7. Research Ethics

Research ethics including informed consent, anonymity, and confidentiality, which are carefully managed during the conduct of the research. The research ethics approval letter was issued by the Research Ethics Committee of Dr. Moewardi Hos-pital Surakarta on March 27 2024 with number 835/III/HREC/2024.

RESULTS

1. Sample Characteristics

This research was conducted in the Banjar-negara Community Health Center 2 area which includes several sub-districts, namely Sokayasa, Sokanandi, Parakancanggah, Krandegan, Semarang, Cendana, Argasoka, and Ampelsari. Researchers took a sample of 100 women of reproductive age who had undergone VIA screening at the Banjarnegara Community Health Center 2. Then, another 100 women of reproductive age were those who had never been screened for VIA. After that, the researchers also carried out univariate analysis to categorize the results obtained. The categorization results can be seen as characteristics of the research sample in Table 1.

Table 1. Frequency distribution of respondent characteristics (categorical data)

Variable	Category	Frequency (n)	Percentage (%)
Attitude	Negative	57	28.5
	Positive	143	71.5
	Total	200	100
Subjective norm	Negative	86	43
	Positive	114	57
	Total	200	100
Perceived behavioral control	Low	81	40.5
	High	119	59.5
	Total	200	100
Intention	Weak	65	32.5
	Strong	135	67.5
	Total	200	100
Income	Low	90	45
	High	110	55
	Total	200	100
Employment	Unemployed	113	57
	Employed	87	43
	Total	200	100

2. Bivariate analysis

Table 2 shows the relationship between two variables, namely the dependent variable and the independent variable.

a. Attitudes and behavior on the use of VIA ccreening

Bivariate analysis regarding attitudes and behavior on the use of VIA screening (OR= 4.63; 95% CI= 2.32 to 9.23; p<0.001). This showed that women of reproductive age with a positive attitude were 4.63 times more likely to undergo VIA screening compared to those who have a negative attitude. This relationship was also statistically significant.

b. Subjecive Norm on the Use of VIA Screening

Bivariate analysis regarding subjective norms and behavior in using VIA screening

(OR= 6.98 95% CI= 3.71 to 13.15; p<0.001). This mean that women of reproductive age with positive subjective norms were 6.98 times more likely to undergo VIA screening compared to those with negative subjective norms. This relationship was also statistically significant.

c. Perceived Behavioral control on the use of VIA screening

Bivariate analysis regarding perceived behavioral control and behavior in using VIA screening (OR= 8.67; 95% CI= 4.53 to 16.83 p<0.001). This showed that women of reproductive age with high perceived behavioral control were 8.67 times more likely to conduct VIA screening compared to those with low perceived behavioral control. This relationship was also statistically significant.

d. Behavioral intention on the use of VIA screening

Bivariate analysis regarding behavioral intentions and behavior in using VIA screening (OR= 9.49; 95% CI= 4.47 to 29.89; p<0.001). This showed that women of reproductive age with strong behavioral intentions were 9.49 times more likely to conduct VIA screening compared to those with weak behavioral intentions. This relationship was also statistically significant.

Table 2. Results of bivariate analysis

Variable	VIA Screening				OR	95% CI		p
	Yes		No			Lower Limit	Upper Limit	
	N	%	N	%				
Attitude								
Negative	14	24.56	43	75.44	4.63	2.32	9.23	< 0.001
Positive	86	60.14	57	39.86				
Subjective Norm								
Negative	21	24.42	65	75.58	6.98	3.71	13.15	< 0.001
Positive	79	69.30	35	30.70				
Perceived Behavioral Control								
Low	17	20.99	64	79.01	8.67	4.47	16.83	< 0.001
High	83	69.75	36	30.25				
Intention								
Weak	11	16.92	54	83.08	9.49	4.53	29.89	< 0.001
Strong	89	65.93	46	30.07				

3. Path analysis

Path analysis is a type of analysis used to analyze cause and effect relationships between variables. The path analysis results are displayed in Table 3

a. Intention on the use of VIA screening

The results of the path analysis showed that intention directly influenced the behavior of using VIA screening. This indicated that women of reproductive age with strong intentions were 6.56 times more likely to undergo VIA screening compared to those with weak intentions. This relationship was also statistically significant (OR = 6.56; 95% CI 2.97 to 14.48; p < 0.001).

b. Perceived behavioral control on the use of VIA screening

The results of the path analysis showed that perceived behavioral control directly influenced the behavior of using VIA screening. This mean that women of reproductive age with high perceived behavioral control were 6.23 times more likely to undergo VIA screening compared to those with low perceived behavioral control. This relationship

was also statistically significant (OR = 6.23; 95% CI 3.07 to 12.65; p < 0.001).

c. Attitude with intention

The results of path analysis showed that attitudes indirectly influenced the behavior of using VIA screening through intentions. This shows that women of reproductive age with a positive attitude were 2.73 times more likely to have the intention to conduct VIA screening compared to those who have a negative attitude. This relationship was also statistically significant (OR = 2.73; 95% CI 1.31 to 5.69; p = 0.007).

d. Subjective norms with intention

The results of the path analysis showed that subjective norms indirectly influenced the behavior of using VIA screening through intention. This showed that women of reproductive age with positive subjective norms were 3.48 times more likely to have the intention to conduct VIA screening compared to those with negative subjective norms. This relationship was also statistically significant (OR = 3.48; 95% CI 1.71 to 7.07; p= 0.001).

e. Perceived behavioral control with intention

The results of path analysis showed that perceived behavioral control indirectly influenced VIA screening use behavior through intention. This mean that women of reproductive age with high perceived behavioral control were 3.03 times more likely to have the intention to conduct VIA screening compared to those with low perceived behavioral control. This relationship was also statistically significant (OR= 3.03; 95% CI 1.50 to 6.09; p= 0.002).

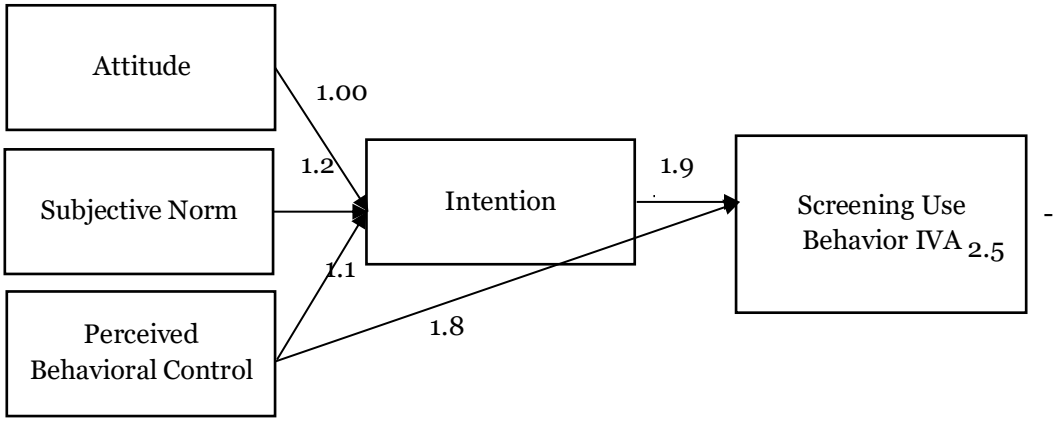

Figure 1. Path analysis of the theory of planned behavior implementation on the behavior of using VIA screening

Table 4. Results of analysis of the theory of planned behavior implementation on the behavior of using VIA screening

Dependent Variable		Independent Variable	OR	95%CI		p
				Lower Limit	Upper Limit	
Direct Effect						
The Use of VIA Screening	←	Intention	6.56	2.97	14.48	< 0.001
	←	Perceived Behavioral Control	6.23	3.07	12.65	< 0.001
Indirect Effect						
Intention	←	Attitude	2.73	1.31	5.69	0.007
	←	Subjective Norm	3.48	1.71	7.07	0.001
	←	Perceived Behavioral Control	3.03	1.50	6.09	0.002

DISCUSSION

The results showed that the behavior of using IVA screening was directly influenced by intention (OR= 6.56; 95% CI= 2.97 to 14.48; p< 0.001). Strong intentions may increase the likelihood of using IVA screening. In general, the stronger a person's intention to do something, the more likely they are to do it. Strong intentions tend to be more accurate in predicting behavior, reduce the gap between intention and action, and are more consistent over time and less likely to change (Asare et al., 2023; Conner and Norman, 2022).

This research is consistent with previous research which shows that in the TPB, intention is the main factor influencing human behavior. Intention determines how likely a person is to carry out a behavior, and is influenced by attitudes towards the behavior, subjective norms, and perceived behavioral control (Xin et al., 2023). Intention to undergo VIA screening, an early detection method for cervical cancer, has a significant role in determining the level of acceptance of VIA screening among women (Nurramadhani et al., 2022). Therefore, to predict behavior, it is important to understand and measure intentions as the main mediator between psychological factors and actual behavior (Rajeh, 2022).

The results showed that VIA was directly influenced by perceived behavioral control (OR= 6.23; 95% CI= 3.07 to 12.65; p< 0.001). Perceived behavioral control refers to an individual's view of how easy or difficult it is to perform a behavior based on past experiences, available resources, and their personal abilities (Li et al., 2023). This perception influences behavior by influencing the individual's ability to overcome obstacles and challenges in implementing the behavior.

Perceived behavioral control is a key aspect in the TPB which suggests that individuals' beliefs about their ability to carry out an action influence how often and how well the behavior is carried out (Kiriakidis, 2017). This is supported by research showing that a high level of perceived behavioral control can provide a significant boost in encouraging individuals to take preventive action such as VIA screening for cervical cancer (Hardin and Ricks, 2017; Jha et al., 2022). By strengthening this perception through education, social support, and easy access to health services, participation in VIA screening and overall cervical cancer prevention efforts can be increased.

The results showed that behavioral intentions were influenced by attitudes towards behavior (OR= 2.73; 95% CI= 1.31 to 5.69; p= 0.007). A positive attitude can increase the intention to undergo IVA screening. Previous research also concluded that attitude has a key role in determining a person's intention to carry out a behavior. A positive attitude towards a behavior can significantly predict an individual's intention to do it. Thus, the more positive a person's attitude is toward an action, the higher the likelihood that they will intend to perform it (Barbera and Ajzen, 2020; Rafi'ah et al., 2018).

A cross-sectional study in Ethiopia with 832 women of reproductive age showed that attitudes towards behavior influenced women's propensity to undergo cervical cancer screening. A positive attitude directly increases their intention to undergo screening. Information, education and communication campaigns are needed to form positive attitudes towards cervical cancer screening. Women who believe that cervical cancer screening is important for early detection and more effective treatment are more likely to be willing to undergo screening (Alemnew et al., 2020).

Research shows a positive relationship between Maslow's hierarchy of needs and

attitudes toward behavior, indicating that when an individual's needs are met, their attitudes toward behavior tend to become more positive. Related to behavior, the hierarchy of needs influences individuals by shaping their attitudes towards certain actions. For example, when physiological needs are not met, individuals may be less motivated to engage in behaviors that require energy and resources (Rakic & Zivkovic, 2017).

The results showed that behavioral intentions were influenced by subjective norms (OR= 3.48; 95% CI= 1.71 to 7.07; p= 0.001). Positive subjective norms can increase the intention to undergo VIA screening. The results of this study are supported by previous research done by Xin et al. (2023) which stated that support from the family, especially from female family members is very supportive in the process of screening and treating cervical cancer. According to research by Eshetu et al. (2022), subjective norms are proven to be directly the main factor that predicts intention to undergo cervical cancer screening. These results are consistent with findings in Singapore and Iran which also show that subjective norms are the main predictor of intentions (Heidari et al., 2021), as well as research involving low-income women (Asare et al., 2023). This shows that participants who received high levels of support and approval from important people such as volunteers, health professionals, and their friends were more likely to intend to undergo cervical cancer screening. Therefore, interventions should focus on strengthening support from friends and organizing volunteers, rather than just focusing on the individual.

The results showed that intention was influenced by perceived behavioral control (OR= 3.03; 95% CI= 1.50 to 6.09; p = 0.002). High perceived behavioral control can increase the intention to undergo VIA screening. The direct influence of perceived behavioral control on intention to undergo cervical cancer screening is very important and significant. Other research also shows that perceived behavioral control is strong in predicting intention to undergo cervical cancer screening. For example, a study found that the relationship between perceived behavioral control and intention to undergo cervical cancer screening had a correlation value of 0.703, indicating a positive and strong relationship (Khani et al., 2021).

Perceived behavioral control is considered the main predictor of intention to undergo cervical cancer screening, followed by subjective norms and attitudes (Wollancho et al., 2020). However, the results of this study show that subjective norms have a more dominant influence, followed by perceived behavioral control, and then attitudes towards the behavior. The influence of perceived behavioral control on intention to undergo cervical cancer screening may vary depending on the context and characteristics of the population studied.

AUTHOR CONTRIBUTION

All authors have made significant contributions to data analysis as well as preparing the final manuscript.

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This study is self-funded.

CONFLICT OF INTEREST

There is no conflict of interest in this study.

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REFERENCES

Alemnew W, Debalkie G, & Azale T. (2020). Intention to screen for cervical cancer among child bearing age women in Bahir Dar City, North-West Ethiopia: Using Theory of Planned Behavior. Int J Women's Health. 12(1): 1215–1222. Doi: 10.2147/IJWH.S277441

An J, Vincent C. (2022). A Critique of the theory of lanned behavior in the cancer screening domain. ANS. 45(2): 179–193. Doi: 10.1097/ANS.0000000-000000395

Asare M, Lanning BA, Montealegre JR, Akowuah E, Adunlin G, & Rose T. (2023). Determinants of low-income women's participation in self-collected samples for cervical cancer detection: Application of the Theory of Planned Behavior. CHERP. 44(1): 65–76. Doi:10.1177/0272684X221090060

Ba D, Ssentongo P, Musa J, Agbese E, Diakite B, Traore C, Wang S, & Maiga M (2021). Prevalence and determinants of cervical cancer screening in five sub-Saharan African countries: A population-based study. Cancer Epidemiol. 72(2): 25–32. Doi: 10.1016/j.canep.2021.101930

Barbera F, Ajzen I (2020). Control interactions in the theory of planned behavior: Rethinking the role of subjective norm. Eur J Psychol. 16(3): 401–417. Doi: 10.5964/ejop.v16i3.2056

Chouksey N, Mishra GC, Chouksey R. (2020). Path analysis in rice yield and yield attributing characters by structural equation model. IJMAS. 9(5): 3098–3103. Doi: 10.20546/ijcmas.2020.905.367

Conner M, Norman P (2022). Understanding the intention-behavior gap: The role of intention strength. Front Psychol. 13(1): 1–16. Doi: 10.3389/-fpsyg.2022.923464

Destriani S, Maryani D, Himalaya D. (2022). Faktor-faktor yang behubungan dengan perilaku pemeriksaan Inspeksi Visual Asam Asetat (IVA) pada wanita usia subur di Puskesmas Kemumu. JMWH. 10(2): 137–141. Doi: 10.37676/jm.v10i2.3269

Dsouza J, Broucke S, Van D, Pattanshetty S, Dhoore W (2022). A comparison of behavioural models explaining cervical cancer screening uptake. BMC Women's Health. 22(1): 1–14. Doi: 10.1186/s12905-022-01801-2

Enyan N, Davies A, Opoku-Danso R, Annor F, Obiri-Yeboah D (2022). Correlates of cervical cancer screening participation, intention and self-efficacy among Muslim women in southern Ghana. BMC Women's Health. 22(1): 1–11. Doi: 10.1186/s12905-022-01-803-0

Eshetu HB, Shitu K, Handebo S (2022). Predictors of intention to receive cervical cancer screening among commercial sex workers in Gondar city, northwest Ethiopia: application of the theory of planned behavior. BMC Women's Health. 22(1): 462. Doi: 10.1186/s12905-022-02055-8

Getahun T, Kaba M, Derseh BT (2020). Intention to Screen for Cervical Cancer in Debre Berhan Town, Amhara Regional State, Ethiopia: Application of Theory of Planned Behavior. J Cancer Epidemiol. 20(2): 1-10. Doi: 10.1155/2020/3024578

Hardin F & Ricks JM. (2017). Attitudes, social norms and perceived behavioral control factors influencing participation in a cooking skills program in rural Central Appalachia. Glob Health Promot. 24(4): 43–52. Doi: 10.-1177/1757975916636792

Heidari SM, Khani JA, Moradi Z, Dehghan A (2021). Evaluating the effect of an

educational program on increasing cervical cancer screening behavior among women in Fasa, Iran. BMC Women's Health. 21(1): 41. Doi: 10.-1186/s12905-021-01191-x

Ilevbare O, Adegoke AA, Adelowo CM (2020a). Drivers of cervical cancer screening uptake in Ibadan, Nigeria. Heliyon. 6(3): 1–13. Doi: 10.1016/j.-heliyon.2020.e03505

Jha S, Dobe M, Taklikar C, Lahiri A (2022). Perceived behavioral control regarding regular physical activity and healthy diet: An observational study among school-going adolescents in an urban area of West Bengal, India. J Educ Health Promot. 11(1): 261. Doi: 10.4103/jehp.jehp_1414_21

Khani A, Jormand H, Harsini PA (2021). The effect of educational program based on beliefs, subjective norms and perceived behavior control on doing pap-smear test in sample of Iranian women. BMC Women's Health. 21(1): 290. Doi: 10.1186/s12905-021-01419-w

Kiriakidis S (2017). Perceived Behavioural Control in the Theory of Planned Behaviour: Variability of Conceptualization and Operationalization and Implications for Measurement. In Stategic Innovative Marketing (1st ed., pp. 197–202). Doi: 10.1007/978-3-319-33865-1_25

Komalawati G, Martha E (2023). Factors that influence the behavior of women of childbearing age for early detection of cervical cancer through IVA tests in Indonesia: Literature review. J Soc Sci Res. 2(11): 4123–4129. Doi: 10.55-324/josr.v2i11.1566

Leong E, Ong SK, Si-Ramlee K, Naing L (2023). Cancer incidence and mortality in Brunei Darussalam, 2011 to 2020. BMC Cancer. 23(1): 466-476. Doi: 10.1186/s12885-023-10962-8

Li X, Dai J, Zhu X, Li J, He J, Huang Y, Liu X, et al. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. Humanit Soc Sci. 10(1): 266. Doi: 10.1057/s41599-023-01724-9

Ningrum M (2019). Persepsi wanita usia subur tentang pemeriksaan Inspeksi Visual Asetat (IVA). JIK Akbiduk. 8(1): 8–15.

Nurramadhani E, Novani D, Amelia FN, Nisa H (2022). Intention towards the early detection of cervical cancer uptake among university students. Al-Sihah. 14(1): 25–37. Doi: 10.24252/al-sihah.v14i1.27068

Rafi'ah, Tualeka AR, Widajati N (2018). A correlation analysis of attitude, subjective norm and behavioral control toward the intention of safety behavior: (A study on plate cutting workers of commercial ships division PT. PAL Indonesia (Persero). IJPHRD. 9(5): 137. Doi: 10.5958/0976-5506.2018.-00426.6

Rajeh MT (2022). Modeling the theory of planned behavior to predict adults' intentions to improve oral health behaviors. BMC Public Health. 22(1): 1391. Doi: 10.1186/s12889-022-13-796-4

Rakic T, Zivkovic S (2017). Hierarchy of needs and correlation connections as an important element of successful employees' motivation. Ekonomika. 63(4): 61–73. Doi: 10.5937/ekono-mika1704061R

Sary YNE, Ekasari T, Rohmatin H, Ermawati I (2023). Deteksi dini kanker serviks dengan Inspeksi Visual Asam (IVA). JPMN. 3(2): 66–72.

Wang X, Cheng Z (2020). Cross-sectional

studies. Chest. 158(1): 65–71. Doi: 10.1016/j.chest.2020.03.012

Wooldredge J (2021). Path Analysis. J Crim Justice. 2(5): 515–522. Doi: 10.-1002/9781119111931.ch105.

Xin T, Jiang Y, Li C, Ding X, Zhu Z, Chen X (2023). Using planned behavior theory to understand cervical cancer screening intentions in Chinese women. Front Public Health. 11(1): 1–8. Doi: 10.3389/fpubh.2023.1063694