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Implementation of the Information Motivation Behavior Skill Model on Cadre's Performance in Surakarta: A Structural Equation Model

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ABSTRACT

Background: Integrated service post cadres are individual volunteers at the community level who are selected by residents based on their ability, integrity, loyalty and commitment to improving community health and playing a role in developing strategies to overcome stunting. This research aims to determine whether there is an effect of implementing the Information-Motivation-Behavior Skill Model on the performance of Integrated services post cadres.
Subjects and Method: This was a cross-sectional study conducted in Surakarta, Central Java, form November to December 2023. A sample of 210 integrated services post cadres was selected using stratified random sampling. 25 integrated service posts in 3 community health centers The data were collected using a structural equation modeling (SEM).
Results: Performance was positively and significantly influenced by behavioral skill (b= 0.26; 95% CI= 0.13 to 0.38; p< 0.001), information (b= 0.16; 95% CI= 0.03 to 0.28; p= 0.014), and motivation (b= 0.18; 95% CI= 0.05 to 0.32; p= 0.008). Goodness of fit of SEM model indicated fit (p= 0.190; RMSEA= 0.037; CFI= 0.99, TLI= 0.98, SRMR= 0.03; CD= 0.92).
Conclusion: The Information-Motivation-Behavioral Skill Model can be used to predict work performance of integrated health post cadres. Performance is positively and significantly influenced by behavioral skill, information, and motivation

Keywords: structural equation model, work performance, information-motivation-behavioral skills, integrated health post cadres

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BACKGROUND

Integrated health service posts or what are usually called Integrated services post are formed based on community needs, managed by, from, for and with the community, with guidance from community health center officers, cross-sectors and other related institutions. Integrated services post is a form of community-based health effort that belongs to the community and is integrated

into community life and culture. The target of integrated services post is the entire community, especially babies, toddlers, pregnant women, postpartum mothers, breastfeeding mothers, and couples of childbearing age (Ministry of Health of the Republic of Indonesia, 2011).

There are two types of activities in Integrated services post, namely main activities and development activities. The main activities themselves consist of family planning activities, maternal and child health, immunization, nutrition, and prevention of diarrhea. In the implementation of Integrated services post there are Integrated services post activities which are called the 5 table system (Ministry of Health of the Republic of Indonesia, 2011).

To implement the Integrated services post program, cadres are needed to act as implementers of activities. Integrated services post cadres are individual volunteers at the community level who are selected by residents based on their ability, integrity, loyalty and commitment to improving community health and playing a role in developing strategies to overcome stunting. Integrated services post cadres regularly attend training to maintain and improve their knowledge and skills in providing services in the community (Siswati et al., 2022).

One of the supporting factors for achieving the goals of the Integrated services post program is the performance of the cadres in implementing the Integrated services post program, such as performance, performance is a term in Indonesian that refers to the results or achievements achieved by a person, a team or organization in carrying out certain tasks or activities. Performance is usually measured based on the extent to which a person or entity succeeds in achieving predetermined goals or standards. In a work context, performance often refers to productivity, efficiency and effectiveness in carrying out certain tasks or work (Cahyandaru et al., 2019).

The performance of Integrated services post cadres can influence the Information-Motivation-Behavior Skill Model is a process in which a person uses knowledge, personal encouragement, skills and actions to achieve goals or act in certain situations where this model can refer to a model or framework that explains how a person obtains information, takes action based on their motivation, and uses skills. Therefore, researchers want to know the effect of implementing the Information-Motivation-Behavior Skill Model on the performance of Integrated services post cadres, using structural equation modeling (SEM) analysis.

SUBJECTS AND METHOD

1. Study Design

This was a cross-sectional study conducted at 25 integrated health posts under 3 community health centers in Surakarta, from November to December 2023.

2. Population and Sample

The study population was integrated health service post cadres. A total of 210 cadres was selected using stratified random sampling.

3. Study Variables

The dependent variable was work performance. The independent variables were information exposure, motivation, and behavioral skill.

4. Operational Definition of Variables

Knowledge information about integrated service posts: information is an important determinant of the effectiveness of health behavior, which consists of important information that can influence a person's health behavior in social life.

Motivation to become an integrated service post cadre: encouragement from within yourself and encouragement from the surrounding environment to carry out positive behavior.

Behavioral skills for carrying out tasks: Behavioral skills are conditions that determine whether good knowledge and motivation can encourage effective preventive actions or behavior.

Integrated service post cadre performance: Job performance refers to the assessment or evaluation of the extent to which individuals, teams, or organizations have succeeded in achieving or even exceeding the goals, tasks, or responsibilities that have been given to them.

5. Study Instruments

The research instrument used for data collection was a questionnaire.

6. Data analysis

Univariate analysis was carried out to obtain the frequency distribution and percentage characteristics of the research subjects. Bivariate analysis to analyze the influence of independent and dependent variables uses the t-test with a significance level of $p<0.050$, and multivariate analysis uses the structural equation modeling (SEM) analysis model.

7. Research Ethics

Research ethics including informed consent, anonymity, and confidentiality, were handled carefully throughout the research process. A letter of approval for research ethics permission was obtained from the Research Ethics Committee of Dr Moewardi Hospital, Surakarta No. K5.18.03/-11376/XI/2023, on November 13 2023.

RESULTS

1. Sample Characteristics

Table 1 shows that based on the age characteristics of research subjects, 98 research subjects (46.67%) were aged <50 years, 112 research subjects (53.33%) were aged ≥50 years. A total of 210 research subjects were male, 2 research subjects (0.95%) and 208 research subjects female (99.05%)

Table 1 shows that based on the characteristics, the results of the research studied are in the form of different levels of education of the research subjects. There were 12 research subjects with a final education of elementary school (SD), research subjects with a final education of junior high school (SMP) there were 36 research subjects (17.14%), research subjects with a final education of senior high school (SMA) there were 131 research subjects (62.38%), there were 31 research subjects with a tertiary education (14.76%).

A total of 210 research subjects obtained working status results for research subjects, including 167 research subjects with non-working status (79.52%), while there were 43 research subjects with working status (20.48%). Table 1. Obtained results of length of time as an integrated service post cadre for research subjects. There were 35 research subjects with the old status of being integrated service post cadres within a period of <2 years (16.67%), while research subjects with the old status of being integrated service post cadres within a period of ≥2 years were 175 research subjects (83.33%).

The characteristics of the integrated service post strata show the results of research into the integrated service post strata where the research subjects were integrated service post cadres. There were 5 research subjects who were integrated service post cadres in the pratama integrated service post strata (2.38%), research subjects who were integrated service post cadres in the strata.

There are 8 research subjects in intermediate integrated service posts (3.81%), research subjects who are integ-

rated service post cadres in the full-time integrated service post strata, there are 89 research subjects (42.38%), and research subjects who are integrated service post cadres in the integrated service post strata. independently there were 108 research subjects (51.43%).

The performance characteristics of integrated service posts were obtained from the performance of research subjects in carrying out their duties as integrated service post cadres. There were 90 research subjects who performed poorly (42.86%), while there were 120 research subjects who performed well (57.14%).

Table 1 shows the results of information, motivation and skill factors that influence the performance of research subjects in carrying out their duties as integrated service post cadres. There were 85 research subjects who had poor information (40.48%), while there were 125 research subjects who had good information (59.52%). There were 86 research subjects who had poor motivation (40.95%), while there were 124 research subjects who had good motivation (59.05%). There were 38 research subjects who had poor skills (18.10%), while there were 172 research subjects who had good information (81.90%).

Table 1. Characteristics of research subjects.

Characteristics	Category	Frequency (n)	Percentage (%)
Age	<50 years old	98	46.67
	≥50 years old	112	53.33
Gender	Male	2	0.95
	Female	208	99.05
Education	Primary School	12	5.71
	Junior Highs School	36	17.14
	Senior High School	131	62.38
	College (Higher education)	31	14.76
Working status	Not working	167	79.52
	Working	43	20.48
Working Period	<2 years	35	16.67
	≥2 years	175	83.33
Strata integrated post services	Primary	5	2.38
	Intermediate	8	3.81
	Advanced	89	42.38
	Independent	108	51.43
Cadre performance	Lacking	85	40.48
	Good	125	59.52
Cadre information	Lacking	90	42.86
	Good	120	57.14
Cadre motivation	Lacking	86	40.95
	Good	124	59.05
Behavioral skills	Lacking	38	18.10
	Good	172	81.90

2. Univariate analysis

Univariate analysis table 2 showed the results in. Performance variable with a number of research subjects of 210, there is a result (Mean= 3.63; SD= 1.19) with a minimum score of 1 and a maximum score of 5. Variable information with a number of research subjects of 210, there is a result of

(Mean: 3.39, SD: 0.88) with a minimum score 1 and a maximum score of 4. The motivation variable with a number of research subjects is 210, there are results (Mean= 8.68; SD= 2.10) with a minimum score of 1 and a maximum score of 10. The behavioral skill variable with a number of research subjects is 210, there are results (Mean= 5.53; SD= 1.06) with a minimum score of 2 and a maximum score of 6.

Table 2. Results of univariate analysis of Implementation of the Information Motivation Behavior Skill Model on Cadre's Performance in Surakarta

Variable	n	Mean	Std. Dev	Min.	Max.
Performance	210	3.63	1.19	1	5
Information	210	3.39	0.88	1	4
Motivation	210	8.68	2.10	1	10
Behavioral Skill	210	5.53	1.06	2	6

3. Bivariate Analysis

The results of the bivariate analysis in this study used a t-test. The results of this analysis were to determine whether there were differences in information, motivation and behavioral skills scores on the performance of integrated service post cadres.

Based on table 3, it shows the results for research subjects who had less information (Mean=3.32; SD= 1.22), whereas for research subjects who had good information (Mean= 3.84, SD=1.31) the analysis showed significant differences (p= 0.002). It can be concluded that if integrated service post cadres have good knowledge and information, it will improve the performance of integrated service post cadres in carrying out integrated service post activities.

Table 3 shows the results for research subjects who had less motivation (Mean= 3.42, SD= 1.22), whereas for research subjects who had good motivation (Mean= 3.78, SD= 1.15) the analysis showed significant differences (p= 0.033).). It can be concluded that if integrated service post cadres have good motivation it will improve the performance of integrated service post cadres in carrying out integrated service post activities.

Table 3 shows the results for research subjects who had poor behavioral skills (Mean=2.77, SD=1.19), while for research subjects who had good behavioral skills (Mean=3.82, SD=1.10) the analysis showed significant differences (p <0.001). It can be concluded that if integrated service post cadres have good behavioral skills it will improve the performance of integrated service post cadres.

Table 3. Bivariate analysis of differences in performance scores with information, motivation and behavioral skills

Variable	Category	n	Mean	SD	p
Information	Lacking	85	3.32	1.22	0.002
	Good	125	3.84	1.31	
Motivation	Lacking	86	3.42	1.22	0.033
	Good	124	3.78	1.15	
Perception of Benefits	Lacking	38	2.77	1.19	<0.001
	Good	172	3.82	1.10	

4. Structural Equation Model (SEM) Analysis

Figure 1 showed the SEM results model which presents the measurement components of the motivational construct and the structural components of the variables that influence performance.

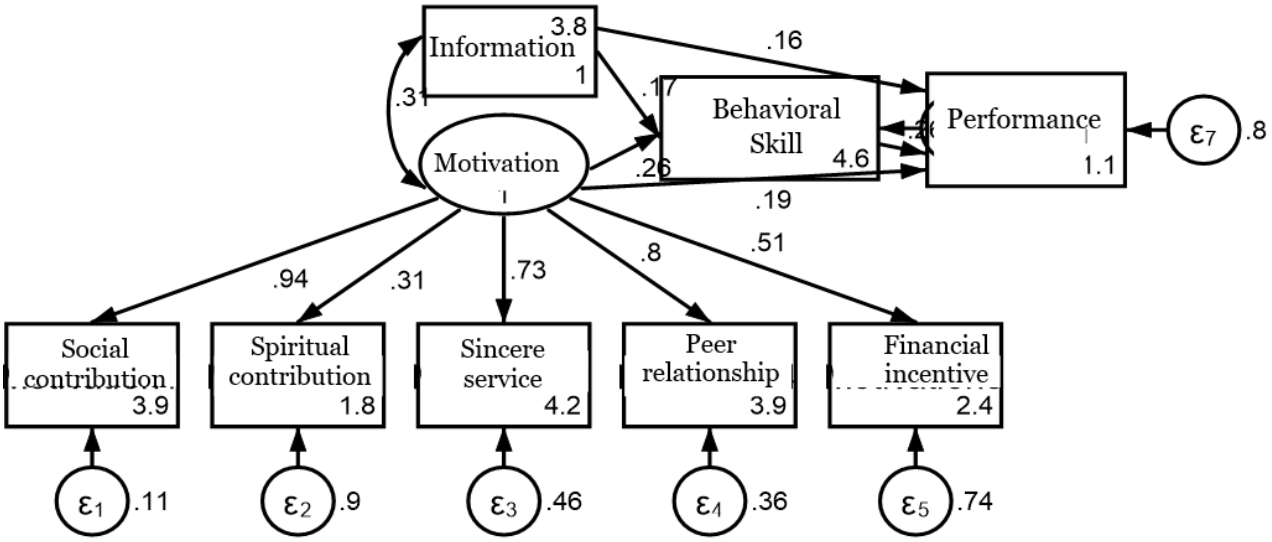

Figure 1. Structural Equation Model of the Information Motivation BehaviorSkill Model on Cadre's Performance

Table 4 showed SEM results regarding factors that influence the performance of integrated health centre cadres. The results of the Confirmatory Factor Analysis show that the motivation variable is significantly formed by a number of indicators with factor loadings (factor loading b) as follows: (1) Social contribution (b= 0.94; p <0.001); (2) Spiritual contribution (b= 0.31; p <0.001); (3) Sincere service (b= 0.73; p <0.001); (4) Colleague relationships (b= 0.79; p <0.001); and (5) Financial incentives (b= 0.51; p <0.001).

Table 4. The results of structural equation model the information motivation behaviorskill model on cadre's performance

Dependent variable		Independent variable	Regression coefficient (b)	95% CI		p
				Lower bound	Upper bound	
Structural component						
Behavioral skill	←	Information	0.17	0.03	0.30	0.014
		Motivation	0.26	0.13	0.40	<0.001
Performance	←	Behavioral skill	0.26	0.13	0.38	<0.001
	←	Information	0.15	0.03	0.28	0.014
	←	Motivation	0.18	0.05	0.32	0.008
Measurement component						
Motivation	→	Social contribution	0.94	0.90	0.98	<0.001
	→	Spiritual contribution	0.31	0.18	0.44	<0.001
	→	Sincere service	0.73	0.66	0.80	<0.001
	→	Peer relationship	0.79	0.73	0.85	<0.001
	→	Financial incentive	0.51	0.40	0.61	<0.001
p= 0.190. RMSEA = 0.037. CFI = 0.99. TLI = 0.98. SRMR= 0.03. CD = 0.92						

Performance of integrated health centre cadres is influenced by constructs in accordance with the Information-Motivation Behavioral Skills Model theory. Cadre performance is directly affected by behavioral skills (b= 0.26; 95% CI= 0.13 to 0.38; p <0.001), information (b= 0.15; 95% CI= 0.03 to 0.38; p= 0.014), and motivation (b= 0.18; 95% CI= 0.05 to 0.32; p= 0.008).

Cadre behavioral skill was increased with information (b= 0.17; 95% CI= 0.03 to 0.30; p= 0.014) and motivation (b= 0.26; 95% CI= 0.13 to 0.40; p <0.001).

Table 4 showed that goodnees of fit indices confirm that the SEM model is fit (p= 0.190; RMSEA= 0.037; CFI= 0.99. TLI= 0.98; SRMR= 0.03; CD = 0.92).

DISCUSSION

Performance of integrated health cadres is influenced by constructs in the Information-Motivation Behavioral Skills Model. This study found that information exposure was associated with the behavioral skills of integrated service post cadres.

Prior research provides some evidence that information, motivation, and behavioral skills may be influences on behavior (John et al., 2017). Exposure to information plays a critical role in enhancing the behavioral skills of integrated health post cadres (Jose et al., 2023). Access to relevant, accurate, and timely information equips these cadres with the knowledge and confidence required to perform their duties effectively. It facilitates continuous learning and skill development, enabling them to provide better health education, promote healthy behaviors, and manage common health issues within the community. Furthermore, well-informed cadres can adapt more readily to new health policies and practices, ensuring that the health services they deliver are up-to-date and aligned with current standards. This continuous information flow fosters a proactive approach to health challenges, ultimately improving the overall health outcomes in the communities they serve (Dussault and Dubois, 2003).

The results of this study also reported found that motivation was associated with the behavioral skills of integrated service post cadres. Motivating the behavioral skills of integrated health post cadres is crucial for ensuring effective community health services. These cadres play a pivotal role in promoting public health, preventing diseases, and managing healthcare at the grassroots level. By enhancing their behavioral skills, such as communication, empathy, teamwork, and problem-solving, they can better engage with the community, foster trust, and encourage proactive health behaviors. Training programs, continuous education, and supportive supervision are essential to empower these cadres, boosting their confidence and competence. This, in turn, leads to improved health outcomes, increased community participation, and a more resilient healthcare system (Yang et al., 2020).

Based on SEM model, behavioral skill directly affected work performance in integrated health post cadres. Behavioral skills are critical to work performance among integrated health post cadres, significantly influencing their effectiveness and efficiency in delivering healthcare services. Key skills include strong communication, which ensures clear information dissemination and fosters trust with the community; empathy and compassion, essential for providing patient-centered care and building rapport; teamwork and collaboration, vital for coordinated efforts in healthcare delivery; problem-solving abilities, enabling cadres to address challenges and adapt to dynamic situations; and time management,

crucial for balancing multiple tasks and maintaining service quality. Cultivating these skills enhances overall performance, leading to improved health outcomes and increased community satisfaction (Yang et al., 2020).

AUTHOR CONTRIBUTION

All authors have made significant contributions in this study.

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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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