Multi-Dimensional Investigation of Factors Affecting Peer Educator Self-Assurance in Teaching Adolescent Sexual and Reproductive Health

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KEYWORDS
Sexual-Reproductive-Health, Self-Awareness, Commitment, Peer-Educator, Self-Confidence.

ABSTRACT

Purpose: to examine the factors affecting the self-confidence of peer educators. Design/Methodology/Approach: a correlational descriptive study utilizing the SEM method, conducted with 216 health students. Findings: The self-confidence of peer educators is significantly influenced by the following factors: impact from situations, impact from other people, self-awareness, perceived advantages of action, perceived obstacles to action, perceived self-efficacy, emotion connected to the activity, and dedication to a planned course of action. Among these factors, Commitment to Plan Action is the most influential in shaping peer educators' self-confidence. Research limitation/implications: Higher commitment to planning actions, when paired with self-awareness, leads to a significant boost in peer educators' assurance in teaching teenagers about sexual and reproductive health. Practical Implication: This study focuses on enhancing self-awareness while strengthening self-efficacy and commitment to planning actions. Social Implications: The results provide an understanding of the elements that might increase peer educators' self-assurance while instructing adolescents on sexual and reproductive healthcare. Originality/Value: To improve peer educators' self-confidence, the study suggests a framework for raising self-awareness and creating a dedicated action plan.

1. Introduction

Education on reproductive health is essential, particularly for teenagers, to ensure they receive accurate information. High-quality education on reproductive health for adolescents has proven effective in preventing teenage pregnancies, reducing sexually transmitted infections, and reducing risks associated with such many relationships, irregular contraception usage, and initial sexual activity (Minguez et al., 2015; Schalet et al., 2014; Saravanan et al., 2024). To enhance knowledge in this area, it is important to provide complete reproductive health care that specifically responds to women's sexual and reproductive needs. This will enable women to autonomously manage their reproductive functions and processes while also ensuring their reproductive rights are respected. Furthermore, reproductive health is crucial in promoting the optimal development of children, starting from birth and continuing through their schooling, by improving the standard of healthcare services (Chandra-Mouli, Lane, and Wong, 2015). These fundamental services include giving teenagers continuing treatment and education on sexual health, and giving them the ability to make choices about their reproductive health (Nagandla and Kumar, 2020; Clementine et al., 2014).

Teenagers place a high value on the sexual health information they get and prefer to learn from their peers rather than from classroom teaching, therefore healthy students must participate in reproductive health as peer educators (Layzer, Rosapep, and Barr, 2014). Educational programs led by peer educators within their social environment offer significant benefits to young people. Previous research has highlighted several gaps; insufficient information is provided about the specific ways in which peer educators assist in improving comprehensive reproductive health care (Bobir et al., 2024). Several studies suggest that recent graduates, whether they are professionals or still in school, often have a sense of being inadequately trained or lacking the self-assurance to see themselves as "experts" (Gasalberti, 2014). According to Benner's idea, it typically takes 3-5 years to transition from a beginner to a highly skilled professional (Gasalberti, 2014). As a result, several professionals continue to have difficulties in feeling self-assured while advocating for health (Laverack, 2017). Therefore, the purpose of this study is to determine the characteristics that contribute to increased levels of self-confidence among peer educators in the field of reproductive health education. Success and self-assurance are directly related (Perkins, 2019). The conviction in one's capacity to carry out certain activities successfully is referred to as professional assurance (Allobaney et al., 2022). A person's ability to talk with strength and consistency, keep direct eye contact, articulate clearly, speak without being

uncomfortable or anxious, speak with assertiveness, have excellent posture and authority, and communicate with confidence about ideas, thoughts, or perspectives are all signs of self-confidence (Anderson and et al. 2012; Key & Anderson 2015; Perkins 2019). These "confidence signals" are often used as measures of an individual's ability, which may result in higher success in their task.

Consequently, a successful profession may boost self-confidence on the inside as much as the outside. A number of the interventions that have been used to increase self-confidence include self-instruction techniques (Fiorentika, Santoso, and Simon, 2016), cognitive dispersion methods (Saputra and Prasetiawan, 2018), group counseling (Irdanelli et al., 2015), mental training programs (Mamassis and Doganis, 2004), and self-hypnosis (Ilmi, 2017). (Lestari, Astuti, and Rochwidowati, 2020) are some of the measures that have been implemented in order to boost self-confidence. In emphasizing eight beliefs that may be assessed, Pender's Health Promotion Model (HPM) is used to forecast health behaviors that enhance well-being. These opinions are divided down into three categories: personal elements such sociocultural, psychological, and biological components; and two indications from the individual characteristics and experiences (ICE) aspect, which are past associated conduct; six indicators perceived action benefits, perceived action hurdles, self-efficacy, activity-related effect, interpersonal impact, and situational influence are part of the behavior-specific cognition and affect (BSCA) element; and The commitment to a plan of action is one component of the behavioral outcomes (BO) element. The self-assurance of peer educators in reproductive health serves as a representation of their dedication to this study.

2. Methodology

Materials

This study uses a cross-sectional methodology and is quantitative in nature. The sample was selected using random sampling and included 216 midwifery and public health students in their fourth year (after five semesters) who, according to the Chinese instrument's career adaptabilities scale, satisfied the inclusion requirements of being proactive and flexible (Xu et al., 2020). Self-awareness and a desire to plan action are the intervening factors in this study, whereas behavior-specific cognition and emotion are the independent variables. The dependent variable is the self-confidence of peer educators.

Data collection procedures

We distributed a questionnaire to all students from both study programs, evaluating their degree of self-awareness using a tool modified from Govern & Marsch (2001) (Chandra Das, 2019). The Health Promotion Model evaluation (Pender, 1995) and Gottwald (2006) served as the foundation for the factors. The SICKS "Key Skills" Likert scale (Bray, Byrne, and O'Kelly, 2020) was used to assess self-confidence. Participation was voluntary, and only students who provided informed consent and completed the program were included. The questionnaire was administered anonymously, and participants received a written consent form. The questionnaires were sent to participants who recognized the objective of the study and gave their consent. It was made clear to all participants that the survey was optional and had no impact on their grades. This study project has been approved by the Health Research Ethical Clearance Commission and the Institutional Review Board of the Faculty of Dental Medicine at Universitas Airlangga, with reference number 208/HRECC.FODM/III/2023.

Data analysis

Structured equation modeling (SEM), a technique that allows for the testing of causal hypotheses within multivariate data, was used to examine the data. As it enables simultaneous study of several different variables, this method was chosen among the available options. Additionally, respondent demographic data were analyzed using univariate and bivariate methods.

3. Results and discussion

Table 1. Respondent characteristics

Respondent characteristics		Frequency	(%)
Study Program	Midwifery	101	46,8
	Public Health	115	53,2
	Total	216	100
Domicile	Surabaya	109	50,5
	utside the city of Surabaya	107	49,5
	Total	216	100
Organizational experience	Active	135	62,5
	Passive	81	37,5
	Total	216	100
Organizational Position	Member	195	90,3
	Chairman	21	9,7
	Total	216	100
Sickness History	There is	44	20,4
	There is not	172	79,6
	Total	216	100

Table 2. Description of behavior variables - specific cognition and affect

Sub Variabel	Category	F	%	Mean ± SD Median (Min-Maks)
Perceived Benefit of Action	Less	1	0,5	3,10 ± 0,69
	Enough	60	27,8	3 (1-4)
	Good	155	71,8	
Perceived Barriers to Action	Less	36	16,7	2,55 ± 0,95
	Enough	93	43,1	3 (1-4)
	Good	87	40.3	
Percieved Self Efficacy	Less	6	2,8	2,99 ± 0,75
	Enough	65	30,1	3 (1-4)
	Good	145	67,1	
Activity Related Affect	Less	5	2.3	3,03 ± 0,69
	Enough	73	33,8	3 (1-4)
	Good	138	63.9	
Interpersonal Influence	Less	2	0,9	3,10 ± 0,69
	Enough	70	32,4	3 (1-4)
	Good	144	66,7	
Situational Influence	Less	6	2,8	3,19 ± 0,69
	Enough	41	19,0	3 (1-4)
	Good	169	78,2	

Table 3. Indicators based on emotional self-awareness category

Sub Variabel	Category	F	%	Mean ± SD Median (Min-Maks)
Emotional self-awareness	Less	13	6,0	3,22 ± 0,74
	Enough	118	54,6	3 (1-4)
	Good	85	39,4	
Accurate self-assessment to self confidence	Less	3	1,4	3,75 ± 0,53
	Enough	41	19,0	4 (1-4)
	Good	172	79,6	

Table 4. Indicators based on commitment to plan action category

Sub Variabel	Category	F	%	Mean ± SD Median (Min-Maks)

Provide Counseling and Social Support	Less	2	0,9	3,28 ± 0,70
	Enough	44	20,4	3 (1-4)
	Good	170	78,7	
Provide Self-Help Educational Material	Less	0	0	3,37 ± 0,64
	Enough	30	13,9	3 (2-4)
	Good	186	86,1	

Table 5. Indicators based on the peer educator of self-confidence category

Sub Variabel	**Category**	**F**	**%**	**Mean ± SD Median (Min-Maks)**
Collaboration	Less	6	2,8	4,48 ± 0,79
	Enough	15	6,9	5 (1-5)
	Good	195	90,3	
Communication	Less	4	1,9	4,41 ± 0,75 5 (1-5)
	Enough	31	14,4	
	Good	181	83,8	
Creativity and Innovation	Less	5	2,3	4,41 ± 0,75 5 (1-5)
	Enough	21	9,7	
	Good	190	88,0	
Self-direction	Less	5	2,3	4,31 ± 1,75 4 (1-5)
	Enough	34	15,7	
	Good	177	81,9	
Critical Thinking	Less	6	2,8	4,27 ± 0,77 4 (1-5)
	Enough	33	15,3	
	Good	177	81,9	
Using Technology for Learning	Less	5	2,3	4,44 ± 0,73 5 (1-5)
	Enough	15	6,9	
	Good	196	90,7	

Table 6. Results of significance test of indicator weight values for the factors

No	Type of relation	Relationship between factors	Coefficient	T-statistics	p	Conclusion
	Direct	-				
	Indirect	X1 *Behavior specific cognition and affect* -> Z2 *Commitment to plan action* -> Y1 *Self-confidence peer educator*	0.247	4.658	0.000	Significant
	Indirect	X1 *Behavior specific cognition and affect* -> Z1 *Self-awareness* -> Z2 *Commitment to plan action* -> Y1 *Self-confidence peer educator*	0.056	2.853	0.004	Significant
1	Total	X1 *Behavior specific cognition and affect* -> Y1 *Self-confidence peer educator*	0.303			
	Direct	X1 *Behavior specific cognition and affect* -> Z1 *Self awareness*	0.485	7.918	0.000	Significant

	Indirect	-				
2	Total	X1 *Behavior specific cognition and affect* -> Z1 *Self awareness*	0.485			
	Direct	X1 *Behavior specific cognition and affect* -> Z2 *Commitment to plan action*	0.596	10.997	0.000	Significant
	Indirect	X1 *Behavior specific cognition and affect* -> Z1 *Self-awareness* -> Z2 *Commitment to plan action*	0.135	3.939	0.000	Significant
3	Total	X1 *Behavior specific cognition and affect* -> Z2 *Commitment to plan action*	0.731			
	Direct	Z1 *Self-awareness* -> Z2 *Commitment to plan action*	0.278	4.746	0.000	Significant
	Indirect	-				
4	Total	Z1 *Self-awareness* -> Z2 *Commitment to plan action*	0.278			
	Direct	-				
	Indirect	Z1 *Self-awareness* -> Z2 *Commitment to plan action* -> Y1 *Self-confidence peer educator*	0.115	3.275	0.001	Significant
5	Total	Z1 *Self-awareness* -> Y1 *Self-confidence peer educator*	0.115			
	Direct	Z2 *Commitment to plan action* -> Y1_ *Self-confidence peer educator*	0.415	5.043	0.000	Significant
	Indirect	-				
6	Total	Z2 *Commitment to plan action* -> Y1 *Self-confidence peer educator*	0.415			

In Table 1, the characteristics of the respondents are shown in a table. Six sub-variables serve as indications for the BSCA variable, which is evaluated overall. Following is a list of the specifics: There is a propensity among respondents to devote their time and resources to activities that provide favorable consequences, as shown by the fact that 71.8% of respondents fell into the "good" category for the assessed value of the action. For perceived barriers to action, 43.1% of respondents were categorized as "sufficient," suggesting that many respondents experience moderate barriers to taking certain actions, such as unavailability or discomfort. Additionally, 67.1% of those who participated in the survey fell into the "good" category for their assessed level of self-efficacy. This suggests that the participants can reach a certain standard of performance. The majority of respondents display behaviors that favorably impact their activities and minimize negative behaviors, as seen by the 63.9% of respondents who were rated as "excellent" in terms of activity-related affect. 66.7% of participants rated their interpersonal impact as "excellent", suggesting a tendency to engage in behaviors that enhance health services. Additionally, 78.2% of respondents scored "good" on situational influence indicators, reflecting a strong ability among the majority to adapt and develop easily. These findings

are detailed in Table 2. Two indicators were used to measure the self-awareness variable: correct self-assessment of self-confidence and emotional self-awareness. A total of 54.6% of respondents were classified as having "adequate" emotional self-awareness, with the average score for this group being 3.2. On the other hand, 79.6% of respondents classified their accurate self-assessment of their level of confidence as "excellent," with an average score of 3.8. As seen in Table 3, this suggests that students are generally better able to correctly assess their level of self-confidence than they are to accurately measure their level of emotional self-awareness. Two indicators are used to evaluate the commitment to plan action variable: providing self-help educational resources and counseling and social assistance. The average score for commitment to plan action was 3.35. Specifically, although self-help education had a score of 3.4 and 86.1% of respondents rated it as "good," counseling and social support received a score of 3.3 and 78.7% of respondents rated it as "good". According to Table 4, this suggests that both dimensions are given high ratings.

Critical thinking, teamwork, communication, innovation and creativity, self-direction and management, and the use of technology in the classroom are the six sub-variables that are included in the evaluation of the peer educator self-confidence variable. The results are as follows: The average score for collaboration was 4.5, with 90.3% of respondents rated as "good," indicating strong capability in working with others in various professions. In terms of communication, the average score was 4.4, with 83.8% of respondents falling into the "excellent" group. This indicates that they are proficient in expressing and sharing ideas via professional conduct. A total of 88.0% of respondents assessed the level of originality and invention as "excellent" with the average score being 4.4 indicating their capability to develop new solutions and ideas.

For self-management and self-direction, 81.9% of respondents received a "good" score, with an average of 4.3, reflecting their ability to evaluate activity quality based on external feedback. For 81.9% of responders, the average critical thinking score went into the "good" range, demonstrating their skill in analyzing relevant information. Additionally, 90.7% of respondents were rated "good" for their use of technology in education, highlighting their proficiency in applying technology for educational and professional purposes. Table 5 provides specifics on the overall results. A t-test is used to assess the significance of the indicator weight values for the variables. As per the test criteria, it is concluded that the indicators significantly impact the factors if the calculated t-statistic exceeds the t-table value. With a significance threshold (α) of 5%, the test is run as a two-tailed test with 5000 data points used for bootstrapping. Consequently, $t(df=n-1; \alpha/2) = t(4999; 0.025) = 1.96$ is the t-table value. In Table 6, you can see the t-test findings that assess how the indicator weight values affect the components. The model that follows is developed from these findings:

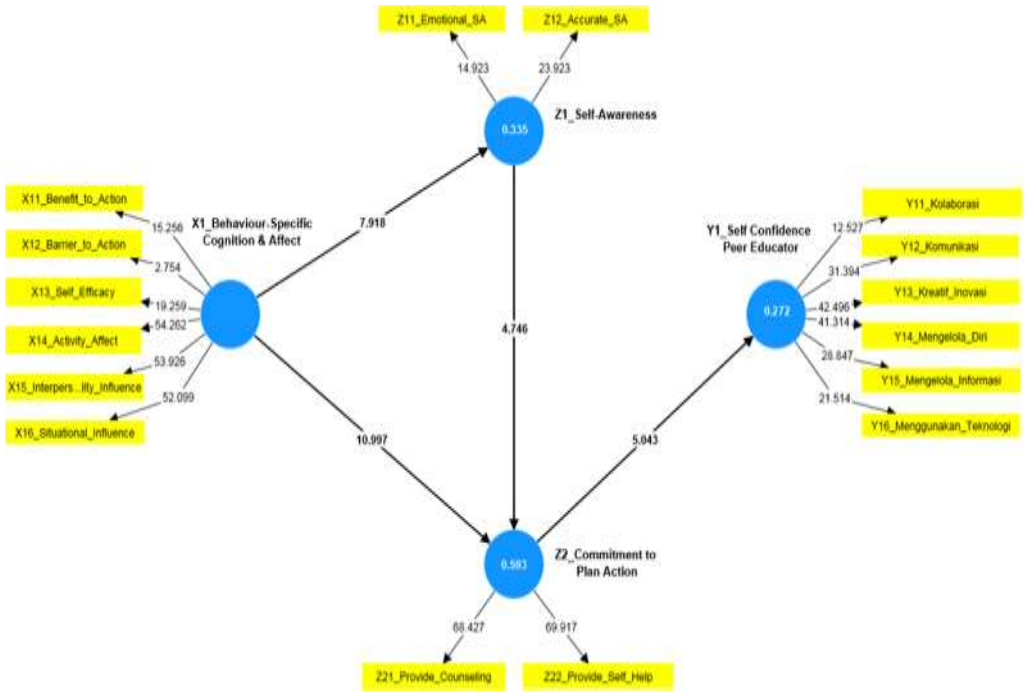

Figure 1. Model Finding

The study's conclusions show that, among the three variables, the following has the most impact on peer educators' (SCPE) sense of self-worth: Self-awareness (SA) comes in third, followed by behavior-specific cognition and emotion (BSCA) and commitment to plan action (CPA). According to the exact correlations, self-awareness (SA) is influenced by BSCA with a coefficient of 0.485. Based on BSCA, CPA is altered (coefficient: 0.731). c. The relationship between SA and peer educators' self-confidence (SCPE) is mediated by a CPA, with a coefficient of 0.115. d. SA has a 0.278 coefficient of effect on CPA. e. SA mediates the relationship between BSCA and the SCPE, with a coefficient of 0.303. f. A CPA, with a coefficient of 0.415, has a direct impact on the SCPE. To evaluate the effects of self-awareness, self-efficacy, perceived benefits, barriers, activity-related affect, interpersonal influence, situational influence, and commitment to plan action are behavior-specific cognition and affect that is represented by factors from the health promotion model. This research uses structural equation modeling to analyze these factors.

With an impact value of 0.247, which is the product of 0.596 and 0.415, the mediator variable commitment to plan action, in the first route, considerably increases the effect of behavior-specific cognition and emotion components on peer educator self-confidence. The effect of behavior-specific cognition and emotion components on peer educator self-confidence is amplified in the second route by the mediator variables self-awareness and commitment to plan action, with an influence value of 0.056, derived from 0.485 x 0.278 x 0.415. Self-awareness is directly influenced by behavior-specific cognition and mood (0.485). Both direct and indirect channels showed that behavior-specific cognition and emotion impact commitment to plan action by 0.731.

The coefficients for the direct and indirect pathways were 0.596 and 0.135, respectively. Furthermore, commitment to planned action is impacted by self-awareness, with a direct effect value of 0.278. Adding 0.278 from 0.415 yields a value of 0.115, which represents the effect of self-awareness on peer educator self-confidence. Peer educators' self-confidence is impacted by a desire to plan action by 0.415. It follows that each of these variables has a substantial impact on self-confidence, with

commitment to plan action (CPA), behavior-specific cognition and emotion (BSCA), and self-awareness (SA) being the three most important variables.

4. Conclusion and future scope

The influence of behavior-specific cognition and emotion components on the self-confidence of peer educators is enhanced by the mediation roles of self-awareness and commitment to plan action. This demonstrates that the Health Promotion Model (HPM) can positively influence students' self-confidence as peer educators, specifically, by being conscious of their actions and attitudes while providing reproductive health services to adolescents, healthcare providers enhance their dedication to promoting health-related initiatives. The primary factors influencing peer educator self-confidence (SCPE) are, in order of dominance: The three key components are commitment to plan action (CPA), behavior-specific cognition and emotion (BSCA), and self-awareness (SA).

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Conflict of interest

This article does not have any possible conflicts of interest

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