

THE INFLUENCE OF IDD EDUCATIONAL MANAGEMENT ON HEALTHY LIVING BEHAVIORS THROUGH KNOWLEDGE MEDIATION IN RECENT-AGE WOMEN IN KARAWANG DISTRICT

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ABSTRACT

Women of childbearing age are particularly vulnerable to Iodine Deficiency Disorders (IDD). To address this, the government, through the Healthy Community Movement, has implemented educational initiatives aimed at raising awareness about the risks, impacts, and solutions for IDD among this group. However, in Karawang Regency, these efforts have faced challenges, particularly in fostering healthy behaviors. This study investigates whether educational management directly influences healthy behaviors in women of childbearing age or indirectly through knowledge mediation. Using a quantitative approach, specifically descriptive and verification methods, data were gathered via an online questionnaire and analyzed with descriptive statistics and PLS-SEM (Partial Least Squares Structural Equation Modeling). The results indicate that respondents hold a positive view of educational management, knowledge, and behaviors related to IDD. Educational management was found to have a significant direct positive effect on healthy behavior, as well as a significant positive effect on knowledge. Knowledge also significantly influenced behavior, and educational management was shown to indirectly impact behavior through knowledge mediation. Overall, the education provided was perceived as effective in enhancing knowledge and encouraging healthier behaviors.

Keyword: Management Education, Knowledge, Behavior, Women of Childbearing Age, Disorders Due to Iodine Deficiency, Karawang Regency.

1. INTRODUCTION

Educational management plays a crucial role in informing women of childbearing age about how to prevent and manage IDD. Iodine is an essential mineral for the human body, particularly critical for the healthy brain development and growth of children. Proper educational initiatives can equip women with the knowledge necessary to ensure adequate iodine intake, ultimately promoting healthier outcomes for both mothers and their children [1], Iodine deficiency causes enlargement of the adenoids [2]. IDD arise from prolonged insufficient iodine levels in the body, leading to significant health issues. IDD is closely linked to cognitive impairments, mental disorders, and reduced intelligence, particularly affecting brain development in children. Adequate iodine intake is essential for preventing these conditions and supporting overall mental and physical well-being. [3], A high prevalence of IDD in

Indonesia can significantly impact the quality of the nation's human resources, as IDD is associated with cognitive impairments and reduced productivity. If more than 10% of the population in a specific area is diagnosed with goiter, that region can officially be classified as an IDD-affected area, highlighting the need for targeted interventions to address iodine deficiency and its consequences [4].

IDD remain a significant micronutrient problem in Indonesia and globally. In Indonesia, approximately 18.8% of the population resides in mildly endemic areas, 4.2% in moderately endemic areas, and 4.5% in heavily endemic areas. Additionally, 5.1% of districts are classified as heavily endemic, while 13.5% and 40.2% of districts are categorized as moderately and mildly endemic, respectively. This widespread presence of IDD highlights the ongoing need for public health interventions to address iodine deficiency and its impact on population health [5]. IDD continues to pose a significant risk for women of childbearing age, making them a primary target for interventions aimed at addressing IDD. Due to their vulnerability and the critical role iodine plays in fetal development, ensuring adequate iodine intake in this group is essential for preventing IDD-related health complications and improving overall maternal and child health outcomes.

Women of childbearing age are particularly vulnerable to goiter, making them a key target group for addressing IDD. IDD poses significant risks for this group, including the potential for babies born to mothers with IDD to have lower cognitive abilities compared to those born to mothers without IDD. Ensuring adequate iodine intake in women of reproductive age is crucial for both maternal health and the cognitive development of their children [6]. Therefore, women of childbearing age must recognize the importance of addressing IDD. Understanding the risks associated with IDD and the significance of adequate iodine intake is essential for their health and the healthy development of their children.

The high incidence of IDD among women of childbearing age is closely linked to their dietary behaviors concerning iodine-rich foods. A person's behavior is often influenced by their level of knowledge, making nutrition education a crucial factor in shaping dietary choices. When knowledge about nutrition is limited, it can lead to poor food selections. Conversely, as nutritional knowledge increases, individuals are better equipped to apply this information in their daily lives, leading to healthier choices that can mitigate the risk of IDD [1]. According to [7], Knowledge and cognition play a vital role in shaping an individual's behavior. A lack of health understanding significantly impacts both knowledge levels and healthy living behaviors. Enhancing education on disease prevention and eradication is crucial for reducing morbidity, mortality, and disability related to both infectious and non-communicable diseases. Such educational programs aim to empower individuals with the necessary information to make informed health choices and improve overall community health outcomes [8].

Based on the opinion of [9] Disease prevention begins with health promotion, which aims to enhance the overall health and well-being of individuals and community groups. These efforts are intended to strengthen physical, mental, and social resilience, thereby protecting the community from various health threats. A key component of these initiatives is education about the specific diseases, as informed individuals are better equipped to make healthy choices and adopt preventive measures. In providing education to the public, health workers must have good abilities and skills in communicating [10]. In other words, health workers with strong communication skills can more effectively build relationships with patients and their families, facilitating better educational outreach. Effective communication enhances the ability to convey important health information, fostering understanding and trust, which is crucial for successful patient education and engagement in their own care. Practically, evidence indicates that the performance of the Directorate General of Public Health, as assessed by the 2020 Public Health Program, is underwhelming. Of the four success indicators, only one met or exceeded the established targets. Notably, one of the indicators that fell short was the Healthy Living Community Movement, highlighting the need for improved strategies and efforts in promoting public health initiatives [11].

The following graph indicates that the target for the percentage of districts and cities implementing the Healthy Community Movement policy in 2020 was set at 30%, but only 21% of that target was achieved, leaving a significant gap of 90%. In response, the Director General of Public Health has outlined strategic steps, including: 1) Advocating for the Healthy Community Movement policy, 2) Raising awareness of the movement among potential partners, 3) Coordinating implementation across sectors, 4) Conducting online advocacy across programs and regions, 5) Redefining success indicators, and 6) Providing financial support for Healthy Community Movement activities in districts and cities through health operational assistance funds [11]. Three of these six strategic steps specifically aim to enhance education management, focusing on improving the delivery of education related to the Healthy Community Movement.

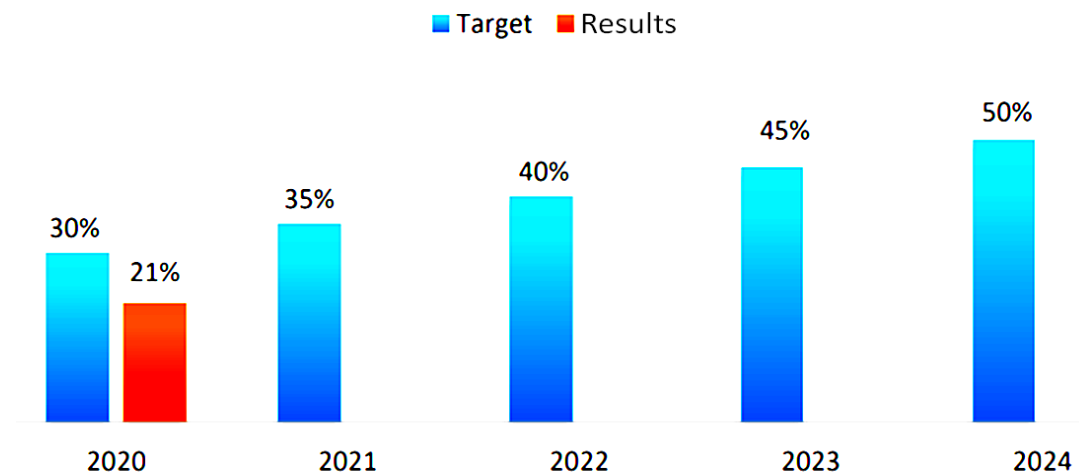


Fig -1: Healthy Community Movement Policy Target and Results

The Healthy Community Movement program is implemented across nearly all districts and sub-districts in Indonesia, including Karawang District. Based on observations by researchers, the program reaches the community through various health centers and clinics, particularly targeting women of childbearing age. While the program is conducted periodically and routinely several times a month, researchers have noted a lack of follow-up, leading to concerns that the program is perceived as a checkbox exercise rather than a meaningful initiative. There is insufficient data to demonstrate the program's impact or gauge community perceptions, making this research a valuable reference for understanding the current state of the Healthy Community Movement in Karawang Regency. Education for patients and their families must be delivered by clinical staff, particularly trained professionals such as doctors, nurses, nutritionists, and pharmacists. Given the diverse range of professions involved in health education, effective coordination of activities is essential to address the specific educational needs of patients. This begins with assessing the educational needs of patients and their families, which not only identifies learning requirements but also ensures that the educational process can be implemented effectively. Education is deemed effective when it aligns with appropriate learning strategies and considers factors such as religious beliefs, cultural values, and literacy levels [9].

Based on research by [12], the findings indicated a significant increase in the knowledge of pregnant women following health counseling sessions. Initially, the majority of pregnant women demonstrated knowledge levels below 70%. However, after receiving the educational intervention, the evaluation showed that most pregnant women achieved a good knowledge level of 80%. This underscores the effectiveness of health counseling in enhancing understanding and awareness among pregnant women. Similar research conducted by [13] The study results revealed significant differences between the intervention group and the control group before and after the educational intervention. Specifically, there was a notable increase in the knowledge of pregnant women in the intervention group following the counseling sessions, demonstrating the effectiveness of the educational program in enhancing their understanding. Another research by [14] Health education significantly impacts the behavior of pregnant women, making it essential for stakeholders to supervise and monitor all activities designed to support maternal health. Effective oversight ensures that educational initiatives are properly implemented and that pregnant women receive the necessary information and resources to promote their health and well-being throughout pregnancy.

2. LITERATURE REVIEW

Health education management encompasses a comprehensive series of activities aimed at mobilizing and integrating health services to effectively plan, organize, direct, report, coordinate, supervise, and manage financing for health education initiatives. This management is crucial for providing women of childbearing age with information on addressing disorders caused by iodine deficiency. Knowledge, defined as the result of "knowing," arises after individuals perceive specific information, with the majority of human knowledge being acquired through visual and auditory means [15]. When women of childbearing age have access to sufficient information and knowledge about Iodine Deficiency Disorders (IDD), they are more likely to engage in behaviors that help prevent and manage the condition. Increased awareness empowers them to make informed decisions regarding their health and nutrition,

ultimately fostering proactive measures to combat IDD. According to [16], Behavior encompasses all human activities, both those that are directly observable and those that are not easily seen by outsiders. This includes actions, responses, and interactions that reflect an individual's attitudes, beliefs, and knowledge. Understanding behavior requires considering both visible actions and underlying motivations that may not be immediately apparent. Education management is assessed through several dimensions, including the provision of education that encourages patient and family participation in the care process, the effectiveness of professional care providers (PPA) in delivering education, thorough assessments recorded in medical records, and the recognition of education as a critical component of patient care. Additionally, educational methods should respect patient values and preferences, while health promotion efforts must be ongoing. Knowledge is evaluated through indicators such as understanding the definition of Iodine Deficiency Disorders (IDD), the factors contributing to IDD, the definition of iodized salt, the impacts of both insufficient and excessive iodized salt intake, the risk factors for IDD, the examination of iodized salt, and the benefits of iodized salt. Behavioral variables are measured using indicators that encompass preventive behavior, healing behavior, recovery behavior, care behavior, health improvement behavior, and the consumption of healthy foods and beverages.

The influence of educational management on behavior can be understood through efficiency improvement theory. This theory posits that individuals with higher levels of education are better equipped to achieve health efficiency, which refers to the ability to maintain one's health using limited resources. This is particularly relevant in adopting healthy lifestyles and behaviors. By effectively managing education, individuals gain the knowledge and skills necessary to make informed health decisions, thereby optimizing their health outcomes even in resource-constrained environments [17]. Health education and healthy behavior share a complementary relationship, meaning they enhance and support one another. Through education, individuals gain knowledge about what constitutes healthy behavior, enabling them to make informed choices regarding their lifestyle. This understanding fosters the adoption of behaviors that promote health, creating a cycle where improved health outcomes reinforce the value of continued education and awareness [18]. Meanwhile [19] mentions that health education is viewed as a crucial driver for promoting healthy lifestyles among the public. By fostering awareness and understanding of healthy behaviors, health education plays a key role in minimizing the risk of health problems. Educated individuals are more likely to adopt healthier habits, leading to improved overall well-being and a reduction in the incidence of various health issues.

Research by [20] indicates that individuals with healthy behaviours typically possess a high level of education. Further studies conducted by [14] demonstrate that health education significantly influences the behaviours of pregnant women, highlighting the need for stakeholders to supervise and monitor activities that support maternal health. Additionally, educational interventions have been identified as the most dominant factor influencing behaviour [21]. Furthermore, health education focused on lactation management also impacts maternal behaviour [22], underscoring the importance of targeted educational initiatives in promoting healthy practices among women.

The relationship between educational management, knowledge, and behavior can be explained through the Health Belief Model, as outlined in research [19]. This theory posits that an individual's willingness and ability to adopt health-supportive behaviors is fundamentally rooted in their knowledge of the benefits associated with these behaviors. Such knowledge is typically acquired through a series of training or educational interventions. Consequently, education serves as a critical foundation for developing both knowledge and healthy behaviors [21], reinforcing the importance of effective educational management in promoting public health.

Education management encompasses the planning, organizing, implementing, and supervising of learning activities within an institution or organization. Its influence on knowledge and behavior can be significant, largely depending on how effectively the institution executes its educational management practices. Through effective management, the quality of learning is enhanced, ensuring that information is effectively communicated. This is particularly important for women of childbearing age, as gaining knowledge about Iodine Deficiency Disorders (IDD) can empower them to adopt behaviors that help address and prevent IDD. Ultimately, improved educational management fosters informed decision-making and positive health behaviors.

[23] defines health education as a collection of experiences that foster habits, attitudes, and knowledge related to individual, community, and population health. Additionally, [23] notes that health education is a vital component of health and medical programs, consisting of planned efforts aimed at changing the behaviors of individuals, groups, and communities. This change encompasses shifts in thinking, behavior, and actions, with the ultimate goal of aiding in treatment, rehabilitation, disease prevention, and promoting healthy living. Furthermore, [15] explains that knowledge is the anticipated output acquired by individuals who receive educational input regarding health, emphasizing the importance of education in shaping health-related understanding and behaviors.

Research by [12] indicated an increase in the knowledge of pregnant women, revealing that prior to health counseling during pregnancy, most women scored below 70% in knowledge assessments. Following the counseling,

the majority demonstrated improved knowledge, achieving an 80% score. Additionally, the study found that health education focused on lactation management positively influenced maternal knowledge levels [20]. Knowledge plays a crucial role in transforming health behaviors, particularly regarding healthy living. It equips individuals with an understanding of the consequences of unhealthy behaviors and guides them toward ideal practices and their associated benefits [17]. Consequently, knowledge is a key determinant of an individual's motivation to adopt healthy behaviors, as it is challenging to recognize the healthfulness of one's actions without it [21]. A person's understanding of health is essential for behavior change, and the likelihood of adopting healthy practices increases when individuals are motivated by their knowledge. Research [18] further supports this by demonstrating a relationship between knowledge and the behaviors of women of childbearing age, as evidenced by their willingness to engage in health-promoting actions.

3. METHOD

This research employs both descriptive and verification methodologies aimed at testing the validity of a hypothesis through field data collection. Descriptive research is designed to systematically characterize scientific information derived from the research subjects or objects [24]. In contrast, verification research focuses on model analysis and evidence to ascertain the truth of the proposed hypothesis. Specifically, the verification analysis aims to examine the influence of educational management on knowledge and its subsequent impact on the behaviors of women of childbearing age in Karawang concerning Disorders Due to Iodine Deficiency (IDD).

Data collection methods refer to the techniques employed to gather data that will be analyzed in a study. The primary purpose of data collection is to acquire the necessary information for the research phase, which serves as a foundation for further analysis and the development of new knowledge. Data collection techniques can be categorized based on the research approach used, specifically distinguishing between quantitative and qualitative research methods. Quantitative data collection often involves structured tools such as surveys or questionnaires, while qualitative data collection may utilize interviews, focus groups, or observational methods to gather in-depth insights [25].

Data analysis in this research employs the PLS-SEM method, which is an advancement of Path Analysis. This approach allows for a more comprehensive assessment of the causal relationships between exogenous and endogenous variables. The PLS-SEM method comprises two main components: Outer Model analysis and Inner Model analysis. Prior to conducting these analyses, a descriptive analysis will be performed on each variable and its corresponding indicators to provide a foundational understanding of the data.

3. RESULTS AND DISCUSSION

Characteristics of Respondents

Respondent characteristics offer valuable insights into the demographics and traits of participants in a study. By comprehensively understanding these characteristics, researchers can enhance the depth and context of their analysis, allowing for more nuanced interpretations of the results. This information can reveal patterns and trends within the data that may influence the study's findings and conclusions.

The table indicates that the majority of respondents were aged between 30 and 39 years, comprising 184 individuals or 46% of the total. In addition, 139 respondents, or 34.8%, were aged between 20 and 29 years, while 66 respondents (16.5%) were aged between 40 and 49 years. Lastly, 11 respondents (2.8%) were under 20 years of age. Thus, it can be concluded that most participants in this study were women in the young adult age group, specifically those aged between 20 and 39 years. Most respondents identified as private employees, totaling 155 individuals or 38.7% of the sample. This was followed by 115 respondents (28.7%) who were housewives, and 81 respondents (20.3%) who worked as entrepreneurs. Additionally, 24 respondents (6%) were students, while 16 respondents (4%) were employed in government positions. Finally, 9 respondents (2.2%) represented other professions.

Most respondents in this study had completed their education at the junior high school or high school level, totaling 183 individuals or 45.8% of the sample. This was followed by 158 respondents (39.5%) who had attained a Bachelor's degree (S1), while 39 respondents (9.8%) held a Diploma. Additionally, 18 respondents (4.5%) had a Master's degree (S2), and 2 respondents (0.5%) held a Doctoral degree (S3). In conclusion, the majority of participants had higher education, encompassing those with Diplomas, Bachelor's, Master's, or Doctoral degrees.

Table -1: Characteristics of Respondents

Categories	Frequency	Percentage
Age		
< 20 years old	11	2.8%
20-29 years old	139	34.8%
30-39 years old	184	46%
40-49 years old	66	16.5%
Occupation		
Students	24	6%
Businessmen	81	20.3%
Civil Worker	16	4%
Private Worker	155	38.7%
Housewife	115	28.7%
Others	9	2.2%
Education Level		
Junior/High School	183	45.8%
Diplome	39	9.8%
Bachelor	158	39.5%
Master	18	4.5%
Doctor	2	0.5%
Expenses		
< IDR 3.000.000	36	9%
IDR 3.000.000-Rp 5.000.000	195	48.8%
IDR 5.000.000-Rp 10.000.000	150	37.5%
> IDR 10.000.000	19	4.7%

Most respondents in this study had a monthly income ranging from IDR 3,000,000 to IDR 5,000,000, accounting for 195 individuals or 48.8% of the sample. This was followed by 150 respondents (37.5%) with incomes between IDR 5,000,000 and IDR 10,000,000. Additionally, 36 respondents (9%) reported incomes below IDR 3,000,000, while 19 respondents (4.7%) earned above IDR 10,000,000. In conclusion, the majority of participants fall into the middle-class category, with monthly incomes between IDR 3,000,000 and IDR 10,000,000.

Analysis of Research Results

Hypothesis analysis is conducted to assess the influence between the variables outlined in the research model, as well as to test the validity of the research hypothesis. This analysis consists of two types: direct hypothesis analysis and indirect hypothesis analysis, which involves mediation. A variable is considered to have a significant impact if its p-value is less than 0.05 and its t-statistic value exceeds 1.65. The direction of the influence is determined by the original sample value: a value between 0 and 1 indicates a positive influence, while a value between -1 and 0 suggests a negative influence.

Table -2: Direct Hypothesis Analysis

Hypothesis	Original Sample	T-Statistic	P-Value	Interpretation
H1: Educational Management → Behavior	0.137	3.050	0.001	Accepted
H3: Educational Management → Knowledge	0.738	19.988	0.000	
H4: Knowledge → Behavior	0.693	15.298	0.000	

The interpretation of data shown in Table 2 is as follow:

1. In the first hypothesis, the results showed a T-statistic value of 3.050 and a P-value of 0.001. Since the T-statistic exceeds 1.655 and the P-value is below 0.05, it confirms that educational management has a significant influence on behavior. Additionally, the Original Sample value of 0.137 indicates that this influence is positive, suggesting that effective educational management positively impacts behavior.

2. In the third hypothesis, the analysis revealed a T-statistic value of 19.988 and a P-value of 0.000. Both the T-statistic and P-value confirm that educational management significantly influences knowledge, as they exceed 1.655 and fall below 0.05, respectively. Additionally, the Original Sample value of 0.738 indicates a strong positive influence of educational management on knowledge.
3. In the fourth hypothesis, the analysis showed a T-statistic value of 15.298 and a P-value of 0.000. Both values confirm that knowledge significantly influences behavior, as they exceed 1.655 and are below 0.05. The Original Sample value of 0.693 indicates a strong positive influence of knowledge on behavior.

After completing the direct hypothesis testing, the next step is to conduct indirect hypothesis testing with the knowledge variable serving as a mediator. Here are the results of the indirect hypothesis testing:

Table -3: Indirect Hypothesis Analysis

Hypothesis	Original Sample	T-Statistic	P-Value	Interpretation
H1: Educational Management → Knowledge → Behavior	0.511	11.666	> 1.655	0.000 < 0.05 Accepted

Based on the results of the data processing, the T-statistic and P-value were found to be 11.666 and 0.000, respectively. Since the T-statistic value exceeds 1.655 and the P-value is below 0.05, it indicates a significant influence of the knowledge variable as a mediator in the relationship between educational management and behavior. Additionally, the Original Sample value of 0.511 suggests a positive influence from the mediating variable. Therefore, the second hypothesis is accepted. Based on the examination of the direct influence of educational management on behaviour, which is 0.137, and compared to the indirect influence through the mediation of knowledge, which is 0.511, it is evident that the indirect influence is substantially greater. This indicates that the indirect influence is more significant than the direct influence, as it exerts a more pronounced impact on behaviour. Therefore, we can conclude that the indirect influence of educational management on behaviour, mediated by knowledge, holds greater importance and impact than the direct influence of educational management on behaviour.

The following figure illustrates the inner model formulation:

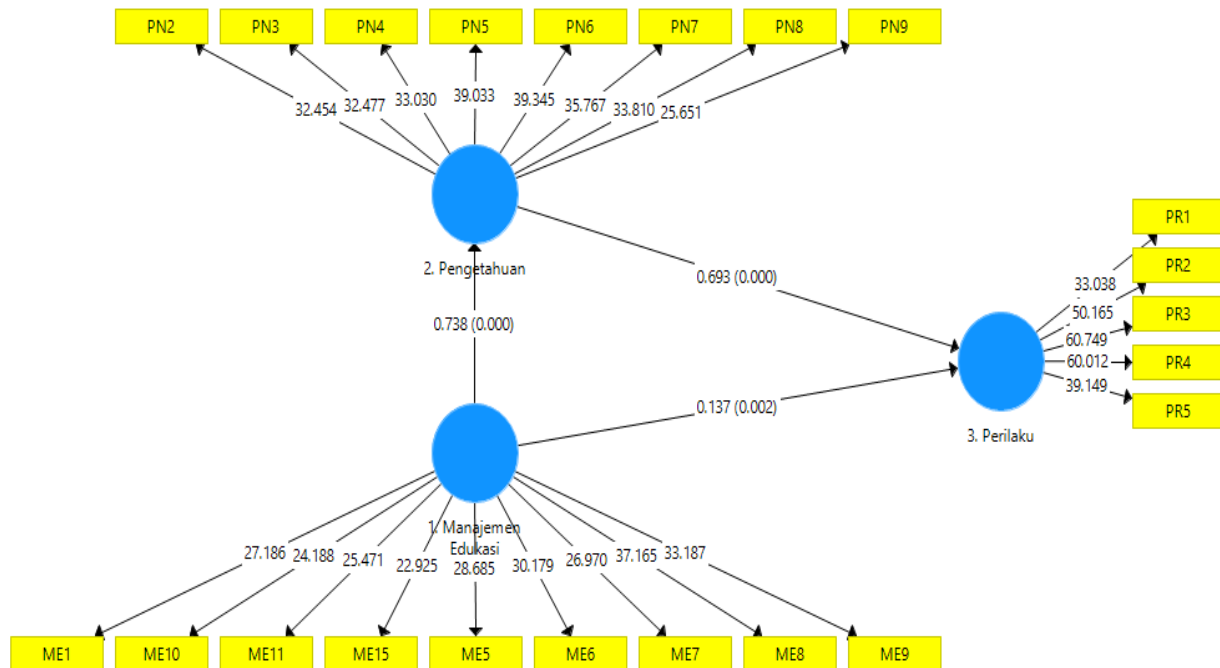


Fig -2: Inner Model

Descriptive analysis found that women of childbearing age in Karawang Regency had a positive perception of the educational management provided to them. They assessed that the education delivered had strong planning,

organization, implementation, supervision, and assessment, leading them to feel they benefited significantly from it. Overall, it can be concluded that the educational program has good management, allowing respondents to gain many advantages. Women of childbearing age particularly regard educational effectiveness as the best aspect of this management. Additionally, the analysis revealed that these women had a favorable view of their knowledge about iodine deficiency disorders (IDD). They felt that their factual, conceptual, procedural, and metacognitive knowledge had improved, especially regarding IDD. This knowledge is deemed very useful, as IDD is particularly prevalent among women in this demographic. They especially value understanding the impact of iodized salt deficiency as the most crucial knowledge they have gained.

It was also evident that women of childbearing age in Karawang Regency had good perceptions of their behavior in avoiding iodine deficiency disorders (IDD). This assessment indicates that they feel they have implemented positive behaviors to reduce the risk of IDD, particularly in managing their daily lifestyles and dietary choices. The results of hypothesis testing reveal that educational management significantly and positively influences behavior. This means that the better the educational management received by the respondents, the more likely they are to demonstrate healthy behaviors. To adopt healthy behaviors that help prevent IDD, individuals must first receive education about IDD, particularly regarding its causes. Such education enables respondents to understand the ideal behaviors necessary for avoiding IDD. The findings of this research are consistent with previous studies that demonstrated a significant impact of educational management on behavior [19], [20], [21], [22].

The results indicate that respondents have a positive perception of both educational and behavioral management. They feel they have adopted healthy behaviors to avoid iodine deficiency disorders (IDD) and believe that the education provided to them on this topic has been effective. Consequently, respondents feel they have gained valuable knowledge about IDD, enabling them to implement healthy and ideal behaviors and lifestyles to prevent it. Practically, the research findings highlight the crucial role of educational management in encouraging and motivating respondents to adopt healthy behaviors. The better the educational management regarding IDD that women of childbearing age receive, the greater their likelihood of engaging in healthy behaviors.

The results of hypothesis testing indicate that educational management significantly influences behavior through the mediation of knowledge. This suggests that before individuals can adopt healthy behaviors to prevent iodine deficiency disorders (IDD), they must first receive education that effectively transforms into knowledge. Only then can they implement the ideal behaviors necessary to avoid IDD. Additionally, the findings underscore the critical role of knowledge, both in directly influencing behavior and as a mediator in the relationship between educational management and behavior. Theoretically, these results align with research by [20], [21], which highlight the mediating role of knowledge in the influence of educational management on behavior. Practically, when individuals receive education about IDD, they gain knowledge about its symptoms, impacts, and causative factors. This understanding empowers them to adopt healthy lifestyles to prevent IDD. Ultimately, it is evident that individuals process the education they receive into knowledge, which then influences their decisions and actions regarding their health behaviors.

Additionally, the findings reveal that the indirect influence of educational management on behavior through knowledge is stronger than the direct influence of educational management on behavior. This indicates that education alone, without being transformed into knowledge, does not significantly impact behavior. In contrast, education that is effectively assimilated and retained as knowledge in the respondents' memory exerts a greater influence on their actions.

The results of hypothesis testing confirm that educational management has a significant and positive effect on knowledge. This implies that the higher the quality of educational management provided to respondents, the greater their level of knowledge will be. Education in both general education and health management is essential for informing women about iodine deficiency disorders (IDD), enabling them to develop a solid understanding of IDD and adopt healthier behaviors to prevent it. Theoretically, these findings align with previous research by [15], [16], [17], which also identified a significant relationship between educational management and knowledge.

Descriptive analysis indicates that the respondents in this study, specifically women living in the Karawang area, hold a positive perception of the IDD education management provided to them. Additionally, these respondents believe they possess good knowledge about IDD. This suggests that the educational management related to IDD effectively enhances their understanding, as reflected in their favorable assessments of both variables. Practically, this highlights the importance of educational management in facilitating knowledge acquisition among respondents, particularly in relation to IDD. Furthermore, it suggests that organizations responsible for disseminating knowledge about IDD—such as health services, hospitals, community health centers, and clinics—have effectively fulfilled their roles in educating the community, especially women of childbearing age. This well-executed education plays a crucial role in boosting knowledge about IDD among women in the Karawang area.

The results of hypothesis testing indicate that knowledge has a significant and positive influence on behavior. This means that as respondents' knowledge about IDD increases, their daily health behaviors also improve. For individuals to adopt healthy behaviors to prevent IDD, they must first understand what constitutes ideal behavior and the factors that contribute to IDD. Sufficient knowledge equips them to make necessary adjustments in their behavior. Theoretically, these findings align with previous research by [7], [13], [14], which highlighted the significant impact of knowledge on behavior. Descriptive analysis further reveals that respondents perceive these two variables positively. They believe they possess a good understanding of IDD, which motivates them to lead a healthier lifestyle to mitigate the risk of IDD. Practically, before someone can adopt a specific behavior, they need to have a solid understanding of what constitutes appropriate behavior and the purpose behind it. In the context of this research, the goal of such behavior is to prevent IDD. Without sufficient knowledge, individuals may struggle to implement ideal behaviors that align with established guidelines or recommendations necessary for avoiding IDD.

4. CONCLUSIONS

Based on the research results, the following conclusions can be drawn: Women of childbearing age in the Karawang area perceive that educational management regarding iodine deficiency disorders (IDD) has been effectively implemented, resulting in good levels of knowledge and positive behaviors to prevent IDD. Educational management has a significant positive impact on the behavior of these women, indicating that improvements in educational management will also enhance their health behaviors. Furthermore, knowledge plays a crucial mediating role in the relationship between educational management and behavior, with indirect influence showing a greater impact than direct influence. This highlights the importance of knowledge as a mediator in shaping behavior. Additionally, educational management positively affects the knowledge of women regarding IDD, suggesting that an increase in educational management correlates with enhanced knowledge. Lastly, knowledge itself significantly influences behavior, meaning that as knowledge increases, so too will healthy behaviors aimed at preventing IDD.

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