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Original Article

The Mediating Role of Health Center Capacity in the Relationship Between Work Motivation and Competency Among Barangay Health Workers

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Abstract. This study investigated the determinants of competency among Barangay Health Workers (BHWs) in the Province of Rizal within the framework of the Universal Health Care (UHC) Law. Using a descriptive-correlational design, the study examined the relationships among health center capacity (based on WHO building blocks), work motivation (motivator-hygiene factors), and level of competency (knowledge, skills, and attitudes). Data were gathered from 314 BHWs across six municipalities using a four-part validated questionnaire and analyzed through Pearson's correlation and mediation analysis. Results revealed a mature workforce (mean age 51) with high intrinsic motivation, particularly in the sense of achievement (M = 4.73), yet facing significant extrinsic challenges regarding salary and work security. While BHWs demonstrated high competency in basic primary care, proficiency declined in specialized administrative tasks. Mediation analysis confirmed that Growth significantly impacts Skills ($\beta = 0.278$, $p < 0.001$), but its influence on Attitude is contingent upon the empowerment of the health workforce. Notably, a suppressor effect was identified where excessive health facility reporting ($\beta = -0.047$, $p = .006$) acts as an administrative bottleneck. The study concludes that while BHWs are driven by communal duty, optimizing their role requires transitioning from glorified volunteerism toward formalized employment, streamlined reporting, and enhanced social protection to ensure sustainable grassroots healthcare delivery.

Keywords: *Barangay health workers; Competency; Health center capacity; Motivation; Primary healthcare.*

Global public health is characterized by interconnected challenges that transcend national borders, necessitating unified international collaboration to address emerging security threats. Within this landscape, the Philippine healthcare system operates through a bifurcated structure of public and private sectors, fundamentally reshaped by the Universal Health Care (UHC) Law (Republic Act 11223). This reform mandates the automatic enrollment of all citizens into the National Health Insurance Program to ensure equitable access to quality care. Central to the success of this mandate are Barangay Health Workers (BHWs), who serve as the primary link between the community and formal medical services. While Ibo (2019) emphasizes that BHW effectiveness is contingent upon structural support—including functional health stations and the deployment of permanent midwives, there remains a critical need to examine the internal and external drivers that sustain these

volunteers within the UHC framework.

BHWs' motivation is a multidimensional construct that directly influences the sustainability of community-level interventions. Mallari et al. (2020) suggest that BHW dedication often transcends financial compensation, rooted instead in intrinsic factors and a profound sense of communal duty. However, these workers face significant professional hurdles. Johnson et al. (2022) identified key challenges involving social conditions, mental health advocacy, and poor work environments that threaten to erode this intrinsic drive. While the World Health Organization (WHO) Building Blocks framework provides a robust lens for evaluating health system performance (Borghi & Brown, 2022), it has seldom been applied specifically to analyze how systemic pillars—such as leadership, financing, and service delivery—intersect to influence the motivational health of the community volunteer workforce in rapidly urbanizing provinces.

Despite the legislative protections offered by Republic Act 7883 and various Department of Health (DOH) mandates aimed at professional growth and technical capacity, a significant research gap persists. Current studies frequently focus either on the broad policy implications of UHC or on the clinical outcomes of community programs, leaving the specific motivational determinants of BHWs in the Province of Rizal underexplored. As a key corridor in the CALABARZON (Cavite, Laguna, Batangas, Rizal, and Quezon) region, Rizal presents a unique intersection of rural and peri-urban health demands that test the limits of BHW adaptability. Without a localized, systematic assessment of what drives these frontliners, health administrators lack the empirical basis to optimize workforce retention and service quality.

Methodology

Research Design

This study utilized a descriptive-correlational research design to describe and determine the relationships among health center capacity, work motivation, and competency among Barangay Health Workers. A descriptive correlational research design describes the variables and measures the extent of relationships among them. The descriptive component enables researchers to accurately profile and summarize the current state of these three key elements among Barangay Health Workers in Rizal Province. More critically, the correlational component is essential for testing the hypothesized association—specifically, the mediating role of health center capacity—by examining the strength and direction of relationships among the factors without manipulating or controlling any of them. This non-experimental approach is suitable for examining complex, naturally occurring associations in a real-world setting, providing the necessary data to inform the study's eventual output: a Policy Brief detailing the identified relationships and their influence on health workers' competence.

Participants and Sampling Technique

The study population comprised the Barangay Health Workers (BHWs) of the Province of Rizal. Barangay Health Workers (BHWs) serve as the primary frontliners in various Sitios within the area. They play a crucial role as key informants for disseminating information to the community. It is also crucial that their motivation to work and competency be assessed to address concerns and issues regarding the performance of healthcare facilities. According to the Magna Carta for Barangay Health Workers, approved during the eighteenth congress of the Philippines, third regular session, there must be one (1) BHW for every twenty (20) households. According to the Philippine Statistics Authority report last 2023, the number of households in 2022 was recorded at 555,574, higher by 198,996 households than the 356,578 households posted in 2013.

This study employed a total enumeration sampling technique, involving all Barangay Health Workers (BHWs) from the selected municipalities in the Province of Rizal who satisfied the inclusion criteria. Specifically, the census included every BHW who had completed the mandatory training and attained a minimum service duration of six months, ensuring no eligible participants were excluded. Furthermore, participants had to hold a plantilla position at the Barangay Hall, be officially recognized by the Municipal Health Office, and receive a monthly allowance from the Barangay Office. Individuals currently on vacation, annual leave, or sick leave were excluded from the study.

Research Instrument

The researcher utilized a 4-Part Questionnaire to answer the research problems. Part I of the questionnaire highlights the respondent's demographic profile. Part II used Barangay health workers' perceptions to gather

information on the performance of healthcare facilities; a self-made questionnaire was generated. The questions were derived from the World Health Organization handbook of indicators and measurement strategies for monitoring the building blocks of health systems. Four (4) system building blocks were selected, namely: (a) service delivery, (b) health workforce, (c) health information systems, and (d) access to essential medicines. For service delivery, these tracer items for assessments were used: basic amenities, basic equipment, standard precautions for infection prevention, laboratory, and essential medicines. Health information systems recommended indicators to assess data sources include health surveys, birth and death registration, censuses, health facility reporting, and health system resource tracking. For access to essential medicines, a list of medicines for inclusion in the WHO service availability and readiness assessment methodology: core medicines, additional medicines for infections, chronic diseases, other drugs, reproductive health drugs, malaria and tuberculosis, antiretroviral and protease inhibitors.

Data interpretation was categorized through a specific mean range for the five-point scale, where scores from 4.20 to 5.00 indicate resources are "Always Available," descending to 1.00 to 1.79 for "Never Available." Part III of the study utilizes a questionnaire by Tan and Waheed (2011) to measure motivation, hygiene, and job satisfaction. The instrument evaluates Work Motivation in two categories: Motivator Factors, which address emotional needs such as achievement, advancement, and recognition, and Hygiene Factors, which cover tangible requirements like company policy, salary, and working conditions. Using a five-point frequency scale (ranging from "Always" to "Never"), the tool's reliability was confirmed by Cronbach's alpha scores between 0.70 and 0.84, indicating high internal consistency across all constructs. Part IV of the study assessed the competency of baramgay health workers across three domains—Knowledge, Skills, and Attitude—using an instrument adopted from Taburnal (2020) with official authorization. The tool evaluated ten specific indicators for each domain, ranging from clinical knowledge and primary healthcare services to professional commitment and service-oriented mindsets. Respondents' proficiency is measured using a five-point Likert scale, ranging from "Highly competent" (5) to "Not competent" (1).

Data Gathering Procedure

Research instruments were first subjected to validation to ensure reliability. Subsequently, administrative clearance was obtained from the mayors of various Municipalities in Rizal Province. Pilot testing was conducted, and all measures successfully passed the reliability threshold. The Knowledge, Skills, Health Information System, Health Workforce, and Access to Essential Medicines scales demonstrated excellent reliability, with Cronbach's alpha coefficients exceeding 0.90. Both the Motivator and Attitude scales showed strong internal consistency, yielding scores of 0.82 and 0.82, respectively. While the Hygiene scale recorded a solid score of 0.78, the Health Service Delivery scale produced the lowest alpha at 0.69, yet it is still reliable. Surveys were conducted in selected municipalities of Rizal Province- Taytay (36), Morong (108), Cardona (16), San Mateo (55), Rodriguez (45), and Angono (54). Once the data collection phase was complete, the resulting dataset underwent rigorous statistical processing and analysis.

Data Analysis Procedure

Statistical techniques were used to analyze relationships between variables, test hypotheses, and make inferences about the population from which the data were sampled. For the Profile of Barangay Health Workers, frequency and percentage were utilized. Frequency and percentage are common measures used in data analysis to describe the distribution of categorical variables. For the Perceived Health Center Capacity, weighted mean and standard deviation were used. For the Motivation-Hygiene Factor, weighted mean and standard deviation were utilized. For the competency of barangay health workers in terms of Knowledge, Skills, and Attitudes, weighted mean and standard deviation were also used. To analyze the relationship between the performance of the perceived health center capacity with the motivator-hygiene factors and the competency of barangay health workers, Pearson's correlation coefficient was used. To investigate the mediating role of Perceived Health Center Capacity on the relationship between Motivation-Hygiene Factors and Level of Competency, mediation analysis was performed in JAMOVI (The Jamovi Project, 2025), and Ordinary Least Squares (OLS) regression was used to estimate the model. The indirect effect ($A \times B$) was evaluated using the Delta Method to compute standard errors and 95% confidence intervals. Mediation was considered statistically significant because the confidence interval for the indirect effect did not include zero.

Ethical Considerations

The study received ethics approval from the Trinity University of Asia – Institutional Ethics Review Committee,

with Protocol Code 2025-2nd-CNU-Valenzuelav1. Autonomy and beneficence are upheld through a transparent informed consent process and a commitment to improving public health worker welfare by analyzing the link between facility performance and motivation. To address non-maleficence, mitigate risks of institutional backlash or breaches of confidentiality by emphasizing that results would not affect work standing and by maintaining strict anonymity. This commitment to privacy and confidentiality is operationalized through the use of research codes, password-protected files, and the separate storage of consent forms from data. Finally, the researcher minimized research bias by employing standardized procedures and maintaining transparency regarding potential institutional or political influences. This includes randomized recruitment logs and strict inclusion/exclusion criteria, logging every "refusal to participate" and the reason why to ensure the final sample is not skewed toward a specific demographic, and conducting the surveys in neutral locations such as covered courts and public parks.

Results and Discussion

Profile of Barangay Health Workers

Table 1 reveals the age distribution of the barangay health workers, who are generally a mature and experienced workforce with a high concentration in the middle-aged and older. The calculated mean age for the BHWs is approximately 51 years (N = 314), indicating a mature age group. BHWs in the Philippines are typically middle-aged or older, with a mean age of 51 years old. This is consistent with a tradition in which mature women are typically selected for these community health positions because of their perceived life experience and nurturing tendencies (Taburnal, 2020). Age is negatively associated with digital competence and positively correlated with higher technostress levels, supporting the idea that older, more "veteran" staff face a steeper psychological hurdle when navigating digital transformations (Golz et al., 2021). The largest single group of respondents was High School Graduates at 33.8% of the total sample. Overall, a majority (65.0%) of the BHWs have attained at least some college education (College Undergraduate or higher), while a substantial portion (45.0%) have a maximum attainment of High School or Elementary education. Nevertheless, according to Baliolaa et al. (2024), this educational profile may lead to educational gaps that exacerbate BHWs' challenges, particularly when managing complex health concerns.

Table 1. *Profile of barangay health workers*

	N	Mean	Median	SD	Minimum	Maximum
Age	314	51	50	10.4	25	58
Educational Attainment				**Frequency**	**Percentage**	
Elementary Undergraduate				8	2.5 %	
Elementary Graduate				23	7.3 %	
High School Undergraduate				39	12.4 %	
High School Graduate				106	33.8 %	
Vocational Graduate				38	12.1 %	
College Undergraduate				59	18.8 %	
College Graduate				41	13.1 %	
Length of Service						
More than 6 months but less than 1 year in service				27	8.6 %	
1 to 5 years in service				116	36.9 %	
more than 5 years in service but less than 10 years				52	16.6 %	
10 years or more in service				119	37.9 %	

Perceived Health Center Capacity

Table 2 showed that "Always Available" is seen across most dimensions of health service delivery, resources, and reporting. Access to Essential Medicines (M = 4.61), Health Service Delivery (M = 4.43), and Health Information Systems (M = 4.28) were all interpreted as "Always Available."

Table 2. *Perceived health center capacity*

Dimensions	Mean	Interpretation
Health Service Delivery	4.43	Always Available
Health Workforce	4.17	Often Available
Health Information Systems	4.28	Always Available
Access to Essential medicines	4.61	Always Available

Given that a serious shortage of health workers is predicted in low- and middle-income countries (LMICs) by 2030, the health workforce situation in the Province of Rizal supports the study by Nwadiuko J et al. (2025). If this system continues, it can lead to massive workforce shortages. As indicated by the moderate mean for Health Service Availability, this deficit is more than just a numerical value; it seriously jeopardizes service delivery. Staffing shortages lead to direct service failures, such as extended waiting periods and delayed healthcare interventions, which diminish patient trust and perceived quality regardless of the facility's physical state (Abdillah et al., 2024).

Work Motivation

Table 3 showed that the sense of achievement is the strongest intrinsic motivator for BHWs (*M* = 4.73). The BHWs' significant emphasis on achievement reflects the practical impact of their work as community-level health professionals, in their study on BHWs in the Philippines during the pandemic. Hartigan-Go et al. (2025) supported this claim by emphasizing that the fulfillment of duty and the inherent happiness that comes from serving their communities were the main motivators, frequently surpassing concerns about pay. The strong empowerment and challenge/excitement scores align with BHW duties that frequently require autonomous decision-making and flexibility in responding to a range of complex community health issues.

Table 3. *Motivator factors*

Dimensions	Mean	Interpretation
Achievements	4.73	Always
Advancements	4.48	Always
Work	4.61	Always
Recognition	4.36	Always
Growth	4.69	Always

Table 4 shows that Relationship with Peers (*M* = *4.58*) and Work Security (*M* = 4.49) are the strongest contributors to the BHWs' job satisfaction, consistently interpreted as "Always" agreeable. According to Hamoy et al. (2026), The difficulties that BHWs face were emphasized by Baliolaa et al. (2024), who pointed out that although they are highly motivated by social capital and a sense of community responsibility (which is reflected in their high peer/relationship scores), their work is frequently characterized by inadequate or nonexistent compensation and a lack of appropriate benefits. In a similar vein, Landingin (2024) highlighted that, despite powerful non-monetary motivators such as work stability and relationships, BHWs' formal employment status and financial pay remain significant problems that adversely affect their motivation and retention. This suggests that while BHWs are intrinsically motivated and value their social and work security environment, the extrinsic factor of salary is a critical impediment to satisfaction and may require policy intervention (Landingin, 2024). The relatively high score for "working conditions" might reflect positive aspects of the community or physical environment that are separate from compensation issues.

Table 4. *Hygiene factors*

Dimensions	Mean	Interpretation
Company Policy	4.30	Always
Relationship with Peers	4.58	Always
Work Security	4.49	Always
Relationship with Supervisors	4.35	Always
Money	3.52	Often
Working Conditions	4.06	Often

Competency

Table 5 shows that the BHWs are Highly Knowledgeable in tasks related to immediate and basic community health care, such as maternal and child care, including breastfeeding, immunization, and family planning, oral rehydration, and nutrition (*M* = 4.57). However, the table reveals a progressive decrease in knowledge proficiency for more administrative, specialized, or advanced community health planning duties. The highest-rated competency item is Health Education and Promotion - Primary health care services to the community, such as maternal and child care (*M* = 4.40). The table reveals a strong emphasis on altruistic and committed service: readiness to be of service with a smile (*M* = 4.69), love for work (perform work religiously) (*M* = 4.63)

Table 5. *Competency of barangay health workers*

Statements (Knowledge)	**Mean**	**Interpretation**
1. Topics on maternal and child care, including breastfeeding, immunization, family planning, oral rehydration, and nutrition	4.57	Highly Competent
2. Provision and proper use of essential drugs and herbal medicines	4.06	Moderately Competent
3. Safe water supply, waste disposal, and use of toilets	4.44	Highly Competent
4. Promotion and prevention of oral-dental diseases	4.11	Moderately Competent
5. Prevention and management of diseases of simple illnesses and home remedies	4.27	Highly Competent
6. Proper access and utilization of hospital care as a center of wellness	4.14	Moderately Competent
7. Updated relevant health issues	4.26	Highly Competent
8. Appropriate information, education, and communication materials	4.20	Moderately Competent
9. Referral of patients with complications and those suspected to have communicable disease to the appropriate health center or hospital	4.24	Highly Competent
10. Links between the community and local health agencies	4.3	Highly Competent
Knowledge Overall Mean	**4.26**	**Highly Competent**
Statements (Skills)	**Mean**	**Interpretation**
1. Primary health care services to the community, such as maternal and child care	4.40	Highly Competent
2. Treatment of common diseases and injuries	4.14	Moderately Competent
3. Discussing and explaining the reason behind each action	4.15	Moderately Competent
4. Application of good communication skills	4.21	Highly Competent
5. Promotion of adequate food supply and proper nutrition	4.18	Moderately Competent
6. Monitoring of the health status of household members under the area of service coverage	4.23	Highly Competent
7. Giving advice and care to anyone who comes to you	4.35	Highly Competent
8. Keeping of records of health activities in the community and the health station	4.36	Highly Competent
9. Utilizing the management process in the delivery of health care services	4.34	Highly Competent
10. Management practices of minimizing cost expenditure in medical supplies, materials, and equipment while delivering health care services	4.07	Moderately Competent
Skills Overall Mean	**4.24**	**Highly Competent**
Statements (Attitude)	**Mean**	**Interpretation**
1. Willingness to conduct voluntary service for the community	4.56	Highly Competent
2. Love for work (perform work religiously)	4.63	Highly Competent
3. Self-fulfillment when providing service to people	4.36	Highly Competent
4. Increases morale when the community recognizes BHW's work	4.59	Highly Competent
5. Encouraged to work harder when changes in the health condition/perception of the clients are visible	4.59	Highly Competent
6. Need to feel that they are part of the health system through supportive supervision & appropriate training	4.52	Highly Competent
7. Offers service as the need arises	4.48	Highly Competent
8. Strongly believes and accepts the values of the organization	4.37	Highly Competent
9. One who is willing to exert extra effort for the sake of the organization	4.48	Highly Competent
10. Readiness to be of service with a smile	4.69	Highly Competent
Attitude Overall Mean	**4.53**	**Highly Competent**

BHWs are Highly Knowledgeable in core areas like maternal and child care, immunization, family planning, and nutrition, which strongly supports the established role of BHWs as the primary implementers of basic public health programs in the Philippines (Taburnal, 2020). These are the traditional grassroots functions in which BHWs have historically received consistent training and practical experience. The primary care and health promotion services that BHWs provide, with a focus on family planning, immunization, and maternity and child health (MCH), are repeatedly confirmed to be their principal purpose by research (Mallari et al., 2020; Sison et al., as quoted in Baliolaa et al, 2024). Here, BHWs meet with the expectant moms in groups before consulting them. The BHWs' high scores on "love for work" and "willingness to conduct voluntary service" mirror findings by Mallari et al. (2020), who noted that improving the health and well-being of community members and a sense of responsibility are key motivators for BHWs. Thus, while the BHWs demonstrate a high internal value for service,

the continued need for supportive supervision, appropriate training, and recognition remains essential for the sustainability and effectiveness of their vital role as frontliners.

Perceived Health Center Capacity and Work Motivation

In Table 6, Health Facility Reporting was most strongly correlated with Access to Essential Medicines (r = 0.654, p <.001), a very strong association. This was followed by a strong positive correlation between Health Surveys and Access to Essential Medicines (r = .0449, p <.001). Three other strong correlations were observed in Health Service Delivery: with Work (r = .441, p <.001), with Growth (r = 0.439, p <.001), and with Recognition (r = 0.392, p <.001). The lowest positive yet statistically significant associations were found between Health Workforce and Relationship with Supervisor (r = .152, p = .007) and Health Facility Reporting with Work Security (r = .123, p = .029).

Table 6. *Relationship between the perceived health center capacity and work motivation*

		Achievements	Advanc.	Work	Recog.	Growth	Company Policy
Health Service Delivery	Pearson's *r*	0.294	0.225	0.441	0.392	0.439	0.301
	p-value	< .001	< .001	< .001	< .001	< .001	< .001
Health Workforce	Pearson's *r*	0.201	0.216	0.257	0.306	0.321	0.19
	p-value	< .001	< .001	< .001	< .001	< .001	< .001
Health Surveys	Pearson's *r*	0.13	0.195	0.251	0.315	0.384	0.186
	p-value	0.021	< .001	< .001	< .001	< .001	< .001
Birth and Death Registration	Pearson's *r*	0.129	0.114	0.193	0.29	0.333	0.198
	p-value	0.022	0.044	< .001	< .001	< .001	< .001
Census	Pearson's *r*	0.114	0.119	0.197	0.292	0.291	0.176
	p-value	0.044	0.035	< .001	< .001	< .001	0.002
Health Facility Reporting	Pearson's *r*	0.135	0.208	0.265	0.295	0.368	0.125
	***p*-value**	**0.017**	**< .001**	**< .001**	**< .001**	**< .001**	**0.027**

		Relationship with Peers	Work Security	Relationship with Supervisor	Money	Access to Essential Medicines	Working Conditions
Health Service Delivery	Pearson's *r*	0.274	0.349	0.266	0.189	0.392	0.235
	p-value	< .001	< .001	< .001	< .001	< .001	< .001
Health Workforce	Pearson's *r*	0.201	0.228	0.152	0.103	0.385	0.156
	p-value	< .001	< .001	0.007	0.069	< .001	0.006
Health Surveys	Pearson's *r*	0.165	0.165	0.265	0.155	0.449	0.239
	p-value	0.003	0.003	< .001	0.006	< .001	< .001
Birth and Death Registration	Pearson's *r*	0.136	0.215	0.218	0.139	0.483	0.146
	p-value	0.016	< .001	< .001	0.014	< .001	0.009
Census	Pearson's *r*	0.161	0.181	0.157	0.087	0.464	0.136
	p-value	0.004	0.001	0.005	0.122	< .001	0.016
Health Facility Reporting	Pearson's *r*	0.131	0.123	0.119	0.14	0.654	0.116
	p-value	0.021	0.029	0.035	0.013	< .001	0.04

The strong positive correlations suggest that the effective execution of barangay health workers' (BHWs) data-driven tasks, such as facility reporting and health surveys, is closely linked to resource availability, particularly Access to Essential Medicines (r values of 0.654 and 0.449). Hartigan-Go et al. (2025) noted that inadequate compensation and a lack of incentives, training, and formal recognition—despite BHWs' vital, often front-line roles—hinder their motivation and the overall quality of primary care delivery. Therefore, both resource provision and motivational support are critical for strengthening healthcare facility performance across all core functions of community-based health systems.

Perceived Health Center Capacity and Competency

The noted strong correlation with Health Facility Reporting and Health Service Delivery is particularly salient, as these tasks require accurate technical knowledge and procedural skills (e.g., record-keeping, taking vital signs, giving health education, and appropriate patient referral), which are core functions that distinguish competent BHWs (Carrillo et al., 2023). A lower correlation suggests that excellence in health service delivery (which requires high health knowledge, attitudes, and skills) does not translate as strongly into excellence in administrative tasks such as census-taking. A BHW with an excellent, positive attitude (r = 0.54 with Health Service Delivery) may not see that enthusiasm translate to census functions (r = 0.31), possibly because the latter task is perceived as less central to their primary, highly motivating, health-focused mission (Mirasol & Gordoncillo, 2023).

Table 7. *Relationship between the perceived health center capacity and competency*

		Health Service Delivery	Health Workforce	Health Surveys	Birth and Death Registration	Census	Health Facility Reporting
Knowledge	Pearson's *r*	0.489	0.40	0.447	0.42	0.337	0.407
	p-value	< .001	< .001	< .001	< .001	< .001	< .001
Skills	Pearson's *r*	0.484	0.422	0.471	0.423	0.312	0.35
	p-value	< .001	< .001	< .001	< .001	< .001	< .001
Attitude	Pearson's *r*	0.542	0.443	0.37	0.376	0.307	0.322
	p-value	< .001	< .001	< .001	< .001	< .001	< .001

Perceived Health Center Capacity, Work Motivation, and Competency in Terms of Knowledge

In Table 8, the Direct Effect, Work (β = 0.19336, p = 0.013), Growth (β = 0.19637, p = 0.019), and Work Security (β = 0.12235, p = 0.027) were found to have a statistically significant positive direct effect on Knowledge. However, the application of a mediator, as shown in the Indirect Effect section, reveals that Growth significantly influences Knowledge through two different mediators: Health Service Delivery (β = 0.04434, p= 0.028) and Access to Essential Medicines (β = 0.08884, p < 0.001). Specifically, the total effect of Growth on Knowledge (β = 0.38185, p < 0.001) is substantial, indicating that while Growth has a significant direct path, the inclusion of the two mediators confirms a significant indirect pathway, suggesting a partial mediation. Similarly, the Total Effect model confirms the significance of Work (β = 0.22294, p= 0.009) and Work Security (β = 0.13997, p= 0.02) on Knowledge. This suggests that while a direct path exists, greater Growth also leads to greater Knowledge by improving the quality of Health Service Delivery and Access to Essential Medicines.

Table 8. *Mediating Role of Perceived Health Center Capacity on Work Motivation and Competency in Terms of Knowledge*

				95% C.I. (a)					
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	β	**z**	p	**Decision**
Direct	Work ⇒ Knowledge	0.19336	0.07805	0.04039	0.34633	0.15953	2.47754	0.013	Significant*
	Growth ⇒ Knowledge	0.19637	0.08344	0.03282	0.35992	0.15168	2.35332	0.019	Significant*
	Work Security ⇒ Knowledge	0.12235	0.05546	0.01365	0.23105	0.12765	2.20615	0.027	Significant*
Indirect	Growth ⇒ Health Service Delivery ⇒ Knowledge	0.04434	0.02016	0.00484	0.08385	0.03425	2.20009	0.028	Significant*
	Growth ⇒ Access to Essential medicines ⇒ Knowledge	0.08884	0.02694	0.03605	0.14164	0.06862	3.29823	< .001	Significant*
Total	Work ⇒ Knowledge	0.22294	0.08511	0.05614	0.38975	0.17871	2.61959	0.009	Significant*
	Growth ⇒ Knowledge	0.38185	0.07986	0.22531	0.53838	0.28656	4.78116	< .001	Significant*
	Work Security ⇒ Knowledge	0.13997	0.06026	0.02186	0.25808	0.14188	2.32276	0.02	Significant*

Note. Confidence intervals computed with method: Standard (Delta method)
Betas are completely standardized effect sizes

According to Baliolaa et al. (2024), BHWs' primary role as front-line community health workers aligns with growth that improves knowledge through better health service delivery and access to essential medicines. BHWs are essential to the delivery of health services because they mobilize communities, provide primary care, and disseminate health knowledge, all of which directly impact knowledge dissemination (Mallari et al., 2020).

BHW's Knowledge is often practical and situational. When medicines are available, BHWs are more likely to engage in applied knowledge—the act of dispensing or explaining medications—which reinforces their competency through practice (Ibo, 2019). Also, if a BHW is trained but the health center lacks the structure to deliver health services, that knowledge becomes dormant. Reyes et al. (2023) state that organizational factors, such as a supportive work environment and adequate resources, are critical for sustaining the performance gains of motivated workers. The ongoing undercompensation and the "glorification of volunteerism" (Hartigan-Go et al., 2025) directly undermine the Work Security and Growth variables, which the mediation shows are necessary for the development of Knowledge among BHWs. BHWs, who are often volunteers or receive meager allowances, report a need for better incentives and greater job security. A lack of formal employment status, adequate compensation, and social protection can hinder their motivation, which in turn affects their willingness and capacity to acquire and apply new skills.

Perceived Health Center Capacity, Work Motivation, and Competency in Terms of Skills

In Table 9, the Direct Effect, without the mediator being considered, several variables significantly predicted Skills: Work (β = 0.14762, p = 0.016), Recognition (β = 0.15319, p = 0.013), Growth (β = 0.15622, p = 0.011), and Work Security (β = 0.13465, p = 0.014). When the mediator was introduced and the Indirect Effect, Growth was found to influence Skills through the mediator in three specific ways significantly: via Health Surveys (β = 0.05109, p = 0.003), via Health Facility Reporting (β = −0.04659, p = 0.006), and via Access to Essential Medicines (β = 0.07264, p <0.001). A comparison of the Direct effects to the significant Total effects reveals that all four previously significant direct effects remained significant and positive in Total: Work (β =0.1517, p =0.023), Recognition (β = 0.18114, p <0.001), Growth (β = 0.27796, p <0.001), and Work Security (β =0.14748, p = 0.014). Because the direct effects and total effects remain significant, and given the presence of significant indirect effects, this suggests a pattern consistent with partial mediation for Growth's relationship with Skills through the mediator, potentially in three separate pathways (using Health Surveys, Health Facility Reporting, and Access to Essential Medicines). This indicates that, while the mediator accounts for part of the effect, the original predictors still have a substantial, independent impact on Skills.

Table 9. *Mediating Role of Perceived Health Center Capacity on Work Motivation and Competency in Terms of Skills*

				95% C.I. (a)					
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	β	**z**	p	**Decision**
Direct	Work ⇒ Skills	0.18769	0.07775	0.03532	0.34007	0.14762	2.41421	0.016	Significant*
	Recognition ⇒ Skills	0.14491	0.05834	0.03056	0.25925	0.15319	2.48375	0.013	Significant*
	Growth ⇒ Skills	0.21216	0.08312	0.04924	0.37508	0.15622	2.55234	0.011	Significant*
	Work Security ⇒ Skills	0.13539	0.05525	0.02711	0.24367	0.13465	2.45061	0.014	Significant*
Indirect	Growth ⇒ Health Surveys ⇒ Skills	0.06938	0.02374	0.02285	0.11591	0.05109	2.92253	0.003	Significant*
	Growth ⇒ Health Facility Reporting ⇒ Skills	-0.06328	0.02285	-0.10807	-0.01848	-0.04659	-2.76878	0.006	Significant*
	Growth ⇒ Access to Essential medicines ⇒ Skills	0.09865	0.02854	0.04271	0.15459	0.07264	3.45662	< .001	Significant*
Total	Work ⇒ Skills	0.19335	0.08503	0.02668	0.36001	0.1517	2.27373	0.023	Significant*
	Recognition ⇒ Skills	0.17176	0.0624	0.04946	0.29405	0.18114	2.75271	0.006	Significant*
	Growth ⇒ Skills	0.3784	0.0798	0.222	0.53481	0.27796	4.74206	< .001	Significant*
	Work Security ⇒ Skills	0.14865	0.06021	0.03064	0.26666	0.14748	2.46877	0.014	Significant*

Growth opportunities, which often translate to training and career progression, are consistently linked to better performance and skills development for BHWs. According to Acorda et al (2024), to meet established health standards, it is essential to expand the number of Barangay Health Workers (BHWs) to achieve the recommended population ratio. Furthermore, these workers necessitate formal, ongoing training initiatives to effectively fulfill their multifaceted roles as community organizers, health educators, and primary healthcare providers. The highly significant total effect of Growth on Skills (β = 0.27796, p < .001) supports this notion. Furthermore, the findings on Recognition and Work Security significantly affecting Skills reflect documented issues regarding BHW welfare and motivation. BHWs, who are often volunteers or receive meager allowances, report a need for better incentives and greater job security (Gonzales et. al., 2024). The statistically significant negative effect of Health Facility Reporting (β = -0.04659, p = 0.006) on Skills represents a "suppressor effect" that contradicts the generally positive influence of Growth. While other mediation pathways, such as Health Surveys and Access to Essential Medicines, bolster skill development, the health facility reporting processes appear to create a bottleneck—potentially due to administrative burden or repetitive clerical tasks that divert a Barangay Health Worker's time from active skill acquisition and practical application. The suppressor effect occurs because Health Facility Reporting acts as a negative force that offsets the positive impact of Growth, revealing that administrative burdens actively hinder the skill development that would otherwise occur. Abdel-All et al. (2019) highlight that excessive reporting requirements and clerical tasks often lead to role friction, in which the time spent on documentation significantly limits time available for training, skill development, and actual patient care. This creates a "bottleneck" in which the worker is more of a data-entry clerk than a healthcare provider.

Perceived Health Center Capacity, Work Motivation, and Competency in Terms of Attitude

Before the introduction of the mediator Health Service Delivery in Table 10, several direct effects were significant. Specifically, the relationships between Work → Attitude (β = 0.1506, p = 0.01), Recognition → Attitude (β = 0.1638, p = 0.005), and Work Security → Attitude (β = 0.2486, p <0.001) all showed significant positive direct effects. After

introducing the mediator Health Service Delivery, all corresponding indirect effects were also significant. The indirect effect of Work → Health Service Delivery → Attitude was significant (β = 0.0322, p = 0.029), as was the indirect effect of Recognition → Health Service Delivery → Attitude (β = 0.0442, p =0.006) and Work Security → Health Service Delivery → Attitude (β = 0.0278, p = 0.034). This pattern, in which both the direct and indirect effects remain significant, suggests partial mediation of these relationships. Additionally, The total effects for Work → Attitude (β = 0.1776, p = 0.004), Recognition → Attitude (β = 0.1947, p = 0.001), Growth → Attitude (β = 0.1521, p = 0.005), and Work Security → Attitude (β = 0.2890, p <0.001) were all significant and positive, confirming the overall importance of these independent variables in predicting Attitude. Growth → Attitude had a non-significant direct effect but a significant indirect effect through the mediator (β = 0.0292, p = 0.027), indicating full mediation if the initial relationship was also significant.

Table 10. *Mediating Role of Perceived Health Center Capacity to Work Motivation and Competency in Terms of Attitude*

				95% C.I. (a)					
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	β	**z**	p	
Direct	Work ⇒ Attitude	0.15408	0.05984	0.03679	0.27136	0.1506	2.5748	0.01	Significant*
	Recognition ⇒ Attitude	0.12471	0.04491	0.0367	0.21273	0.16385	2.7773	0.005	Significant*
	Work Security ⇒ Attitude	0.20115	0.04252	0.11781	0.2845	0.24863	4.73052	< .001	Significant*
Indirect	Work ⇒ Health Service Delivery ⇒ Attitude	0.03301	0.01515	0.00332	0.0627	0.03226	2.17883	0.029	Significant*
	Growth ⇒ Health Service Delivery ⇒ Attitude	0.04833	0.01746	0.01412	0.08255	0.04423	2.76857	0.006	Significant*
	Growth ⇒ Health Workforce ⇒ Attitude	0.03169	0.01434	0.00358	0.0598	0.029	2.20984	0.027	Significant*
	Work Security ⇒ Health Service Delivery ⇒ Attitude	0.0225	0.01059	0.00175	0.04325	0.02781	2.1254	0.034	Significant*
Total	Work ⇒ Attitude	0.18398	0.06362	0.0593	0.30867	0.17764	2.89204	0.004	Significant*
	Recognition ⇒ Attitude	0.15003	0.04668	0.05854	0.24153	0.19472	3.21408	0.001	Significant*
	Growth ⇒ Attitude	0.16831	0.0597	0.05131	0.28532	0.15215	2.81936	0.005	Significant*
	Work Security ⇒ Attitude	0.23675	0.04505	0.14846	0.32504	0.28907	5.25581	< .001	Significant*

Note. Confidence intervals computed with method: Standard (Delta method)

Betas are completely standardized effect sizes.

Work, Recognition, and Work Security: the results indicate partial mediation; while these factors directly improve attitudes, a significant portion of their impact is also channeled through improved service delivery. According to Hartigan-Go et al. (2025), insufficient compensation and the lack of benefits are major sources of grievance and demotivation among BHWs. In contrast, the factor of Growth exhibited a different dynamic, showing no significant direct impact on attitude but a significant indirect effect through the Health Workforce. This suggests that professional growth only translates into a positive attitude when it specifically empowers the individual to deliver better health services, highlighting that the "meaningfulness" of the work is a critical bridge for certain organizational investments to be effective. The desire for additional compensation and having complete medical healthcare equipment directly reflects an urgent need for greater work security, which, if addressed, would logically translate to a more positive work attitude (Dagohoy, 2021). This suggests that while they are motivated by Work and a desire for Growth, these intrinsic drivers are often outweighed by the extrinsic need for Work Security.

Conclusion

The findings of this study highlight that while Barangay Health Workers (BHWs) are vital conduits for health service delivery and community mobilization, their capacity for professional development is fundamentally tied to organizational support structures. The significant total effect of Growth on Skills (β = 0.278, p < .001) demonstrates that professional advancement is essential for competency; however, the mediation analysis reveals that Growth translates into positive Attitude only when channeled through empowerment of the Health Workforce, highlighting "meaningfulness" as a critical psychological bridge. Conversely, the "suppressor effect" identified in Health Facility Reporting (β = -0.047) suggests that administrative burdens act as a bottleneck, inducing "role friction" that diverts BHWs from active skill acquisition (Abdel-All et al., 2019). Furthermore, the results indicate that the "glorification of volunteerism" and chronic under-compensation (Hartigan-Go et al., 2025) directly undermine Work Security, which remains a primary extrinsic driver of work attitude. The partial mediation of Recognition and Work Security through service delivery suggests that while BHWs are intrinsically motivated by the desire to serve, the optimization of their skills and morale necessitates a transition from precarious volunteerism toward formalized employment status, adequate social protection, and streamlined

reporting processes to ensure the sustainability of primary healthcare at the grassroots level.

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The researcher declares that he has no conflicts of interest.

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