

# THE IMPACT OF ENGAGEMENT ON JOB COMPLETION'S LEVEL OF MEDICAL STAFF: A CASE AT THAI THUY GENERAL HOSPITAL, THAI BINH

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## ABSTRACT

**Introduction:** Healthcare workers play an important role in the delivery of healthcare around the world. The purpose of this analysis was to explore the impact of healthcare workers' organizational commitment, controlling for demographic variables, on job satisfaction, particularly in the context of the mid-career health sector going through a stressful period in the fight against the COVID-19 pandemic.

**Methods:** This study used a hospital assessment toolkit issued by the Vietnamese Ministry of Health, surveying 156 medical staffs directly providing health care services at Thai Thuy General Hospital, Thai Binh province.

**Results:** The analysis results by the PLS-SEM structural equation model show that, when the cohesion of medical staff is improved, it will lead to a higher level of job completion. Besides, the medical staff must concurrently take on other jobs, which will negatively affect the level of job completion.

**Conclusion:** This implies that the level of the job performance of healthcare workers can depend to a large extent on the organizational commitment and the medical staff's single duty.

*Keywords:* Cohesion, Medical staff, Part-time, Work efficiency, Thai Thuy General Hospital.

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## 1. INTRODUCTION

The COVID-19 pandemic has caused continuous and severe disruption to healthcare systems around the world as well as in Vietnam, due to a sudden increase in demand for medical care. There are a lot of issues related to the allocation of health care resources, which were already in short supply and becoming scarcer. Health workers are not only struggling to control the pandemic but also have to ensure the treatment and care of other patients, especially at the grassroots level.

Since the early 80s of the last century, the World Health Organization has begun to focus on studying the need to evaluate the performance of health workers [1]. Furthermore, health standards and health care delivery depend heavily on healthcare workers. The efficiency of healthcare services is directly related to the commitment to the organization of medical staff, so this is essential for patient safety [2].

In Vietnam, the Ministry of Health has also issued the Hospital Evaluation Toolkit in 2016 [3], and published a revised version in 2019 [4], which has been applied nationwide, to capture and promote the engagement of medical staff to improve the quality of medical examination and treatment from grassroots to central levels.

In the context of the COVID-19 pandemic, the staff of grassroots medical facilities made efforts to contribute to the fight against the pandemic. For example, by March 2022, Thai Thuy General Hospital has received more than 400 patients with COVID-19 for treatment, of which over 300 have recovered and been discharged. Some severe and critical cases were also treated promptly [5]. Moreover, although it is only a lower-level medical facility with limited human resources, right from the time of the epidemic situation, at the beginning of July 2021, Thai Thuy District General Hospital sent 06 doctors and nurses to participate in the treatment and care of patients with COVID-19 at the epidemic center in Ho Chi Minh City. This is a team of young doctors and nurses of the Hospital with professional qualifications and practical experience in treatment, taking samples for testing, and epidemic prevention and control activities [6].

Studying the impact of employee engagement on job performance in the medical profession is becoming more urgent than ever, as health workers, especially at the grassroots level, are the leading force and under pressure in the fight against the Covid-19 pandemic. The results of the analysis contribute to helping health policy makers have an in-depth and scientific insight into this issue right from the grassroots medical level and have appropriate orientations in the future.

## 2. METHODOLOGY

### 2.1. Theoretical framework

According to Kahn's (1990) employee engagement theory, engagement is the simultaneous work and expression of a person's "preferred ego" in work behavior that promotes connection with work and with others in terms of personal presence (physical, cognitive, and emotional) and dynamic effectiveness [7]. When engaged, members of the organization develop their own ability to perform active work roles effectively by channeling personal energy into physical, cognitive, and emotional performance. [8].

Employee commitment to the organization is defined as an employee's identification with the organization's goals and values, their willingness and effort towards the organization, and their intention to stay with the organization. organization; Employee engagement affects the performance of individuals as well as organizations in the field of labor-employment in general as well as in health care in particular [9].

These impacts take place in the labor-employment environment in general at all levels, and not only in the economic, educational, cultural, social, etc, but are also quite popular in the medical field, healthcare [10-19].

### 2.2. Formulate research hypothesis

#### (a) *Relationship between engagement and job performance of healthcare workers*

The importance of employee-organizational engagement in health care is emphasized and appreciated by many scientists. Thanacoody et al stated that "in an environment characterized by constant and uncertain institutional change, policymakers and scholars have



begun to recognize that an engaged, healthy, and motivated workforce is critical to delivering high-quality healthcare.” [20]

Many authors mention the positive impact of organizational commitment on individual and organizational performance and vice versa, according to Guleryuz et al., a lack of cohesion can lead to worse performance [21, 22]. Employees with higher organizational commitment, are willing to put more effort to achieve organizational goals [23]. Accordingly, many authors have shown a positive relationship between organizational commitment and job performance [24].

Engaged employees will bring good results such as improved business perceive business problems, improve performance, and more, trust the organization and respect others and are more productive, innovate, stay in the organization longer, have higher quality and continuous effort, are more energetic, enthusiastic and problem-solving than other employees [25-27].

Similarly, in hospitals, where employee engagement is high, the hospital has better financial performance, or better performance [22, 28]. Therefore, it is expected that a high degree of organizational commitment has a positive impact on hospital performance through the level of job completion of medical staff.

*Hypothesis H0: Engagement has a positive effect on the level of job completion of medical staff.*

*(b) Duties and performance of medical staff*

Having to take on (concurrently) multiple jobs at the

same time can cause health problems. Previous research on the personal effects of multitasking has shown that some people have work stress due to conflicting work schedules and long working hours [29]. This may be related to less sleep in people with multiple jobs [30]. Stress and reduced sleep duration are associated with health problems and consequentially reduced work quality [31-34].

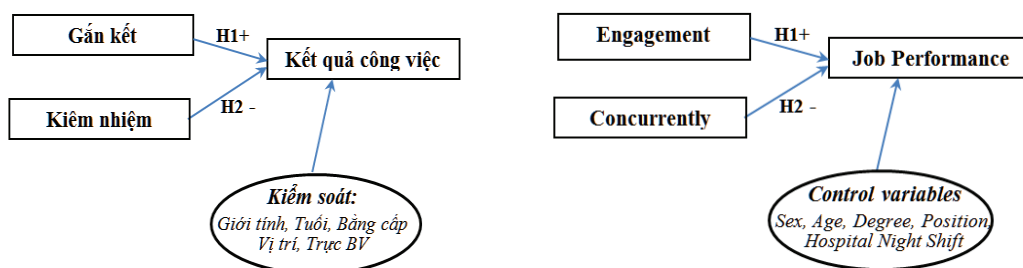
From research in the healthcare field, it is clear that multitasking in emergency departments and hospitals is common. However, cognitive psychology and the real-world multitasking literature suggest that multitasking of any kind ultimately reduces individuals’ efficiency and accuracy in performing them. task [35]. Therefore, it can be predicted that the fact that medical staff has to be part-time will negatively affect the level of their job completion.

*Hypothesis Ha: Part-time work has a negative impact on the level of job completion of medical staff;*

For the results to accurately reflect the impact of factors, in the analytical model several variables need to be considered, specifically: Gender, Age, Highest professional degree, Number of years working at the hospital, Working position, Average number of times per month. Since Age and working seniority (number of years working at the hospital as well as years working in the medical field) are highly correlated, only the Age variable is included in the model to avoid multicollinearity.

Based on the above analysis, the research model is proposed (Figure 1).

Figure 1: Proposed research model



### 2.3. Data collection

This study uses the health worker satisfaction assessment toolkit issued by the Ministry of Health of Vietnam, in which “hospital engagement” has five sub-sections. item and an indicator showing the level of work done [3, 4]. Each sub-item is also rated using a 5-point Likert scale. This toolkit issued by the Ministry of Health is considered to be more relevant than the Employee Satisfaction Assessment Toolkit (JSS of Spector), moreover, it is currently being used in hospitals across the country [36].

Data was collected by sending self-completed questionnaires to staff in early 2022 who are currently working at Thai Thuy General Hospital. A total of 156 questionnaires were sent to all 156 medical staff directly in charge of medical examination and treatment and treatment for patients (clinical, subclinical, and pharmaceutical), out of a total of 210 staff members, hospital staff. The sample size of this survey is satisfactory (minimum of 150 observations) to analyze the model with the number of structures less than 7 ( Hair et al., 2019) [37] and also meets the requirement of 5 times the number of observed variables (Bollen, 1989) [38].

Analysis based on Structural Equation Modeling (SEM - PLS Structural Equation Modeling using Partial Least Squares)

### 3. RESULTS

#### 3.1. Reliability and validity of scale and measurement model

In order for the research results to reflect the truth, the toolkit must be an accurate measure, so it is necessary to conduct a scale test of the observed variables. Several indicators are useful for establishing authenticity and reliability, according to Hair et al. (2010 [39], 2019 [37]) developed and synthesized from research results of k scholars. else, with threshold values:

- *Composite Reliability (CR)* > 0.7 (Bagozzi & Yi, 1988);

The value of convergence - *Convergent Validity* is reflected through: Average Variance Extracted - *Average Variance Extracted (AVE)* > 0.5 (Hock & Ringle, 2010) ;

Cronbach’s Alpha value ≥ 0.7 (DeVellis, 2012) ;

Outer Loading (*OL*) factor ≥ 0.7 (Hair et al., 2016) ;

*Discriminant Validity* is achieved when *the square root of AVE* > the correlation between latent variables (Fornell and Larcker, 1981).

The results of the verification of the indicators show that the data meets the requirements, is consistent with reality, and ensures that it is allowed to be included in SEM analysis, specifically (Table 2):

Table 2: Test values for reliability and authenticity of the scale

Variable	Cronbach’s Alpha	Confidence	Convergence value		Fornell-Larcker . criterion							
		CR	OL (min)	AVE	GK	Gioi	HTCV	Kiem Nhiem	Trinhdo CM	Truc BV	tuoi	Vitri
GK	0.986	0.987	0.901	0.936	0.968							
Gioi	1,000	1,000	1,000	1,000	-0.148	1,000						
HTCV	1,000	1,000	1,000	1,000	0.717	-0.159	1,000					
KiemNhiem	1,000	1,000	1,000	1,000	0.001	-0.003	-0.191	1,000				
TrinhdoCM	1,000	1,000	1,000	1,000	-0.004	0.140	-0.056	-0.107	1,000			
TrucBV	1,000	1,000	1,000	1,000	0.230	-0.022	0.111	-0.037	-0.226	1,000		
tuoi	1,000	1,000	1,000	1,000	0.272	-0.015	0.015	0.372	-0.136	0.132	1,000	
Vitri	1,000	1,000	1,000	1,000	0.220	0.162	0.105	0.033	0.294	-0.083	0.446	1,000

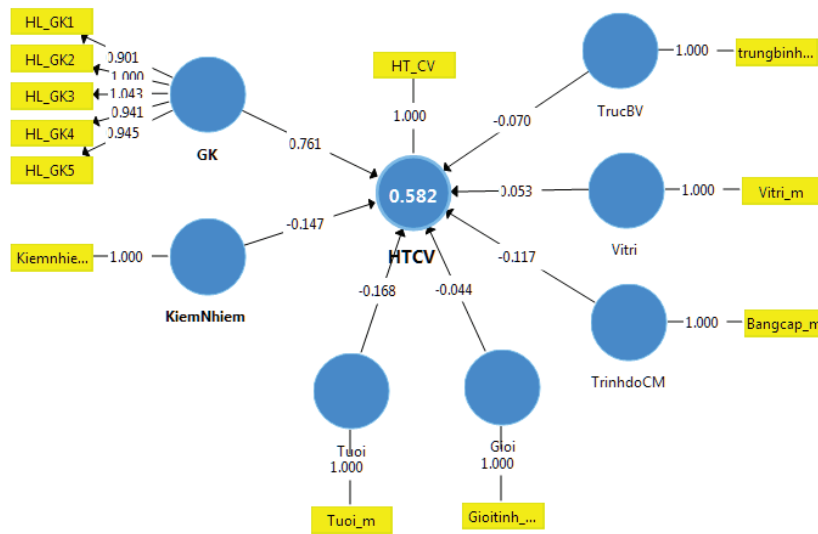


Notes: GK, Gioi (gender), HTCVC, KiemNhiem (concurrent work), TrinhdoCMKT (specialty), TrucBV (on-call), Tuoi (age), Vitri (position): Factors/Variables in the model; CR: Composite Reliability; AVE: Average extracted variance; OL min: Minimum external load factor; **Italic, bold**: Square root of the AVE of latent structures.

Source: Processing survey results in 2022.

With the power of SEM, it allows estimating the elements in the overall model simultaneously, the causal relationship between the latent constructs (Latent Constructs) through the combined indexes of both measurement and structure of the theoretical model. The proposed theory is calculated.

Figure 2. Measurement model



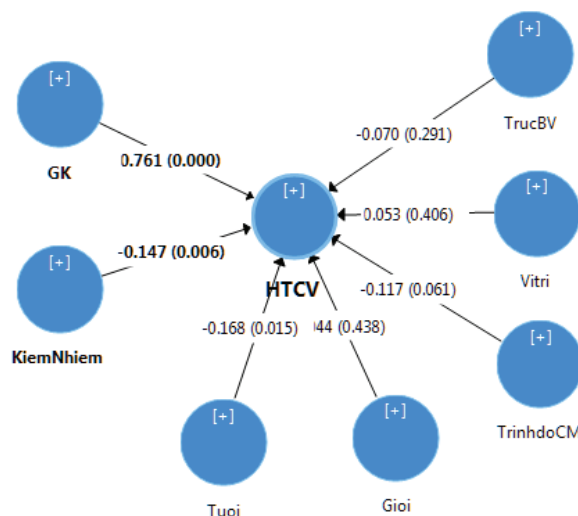
Source: Processing survey results in 2022.

### 3.2 Results of structural model analysis

The analysis results from the PLS-SEM model

according to the proposed research framework show that the normalized path coefficient and the P-value (Figure 3) allow drawing some key findings as follows:

Figure 3. Structure model of PLS-SEM



Source: Processing survey results in 2022.

The organizational commitment (in this case, the hospital) of healthcare workers has a positive effect on their job performance. Beta coefficient is positive and statistically significant ( $\beta_1 > 0$  and P value  $\approx 0.000 < 0.05$  -5% significance level) (Table 3). Therefore, hypothesis H1 is supported. This implies that, the higher the level of engagement of medical staff with the Hospital, the higher their job performance is.

In addition, the fact that medical staff have to hold multiple jobs has a negative impact on their job completion. Negative beta coefficient ( $\beta_2 < 0$  and P-value  $\approx 0.006 < 0.05$  - significance level 5%) (Table 3). Therefore, hypothesis H2 is also supported.

This result is consistent with many previous studies in the field of labor and employment in general as well as in the health care sector in particular, as stated in the overview.

Table 3. Results of testing the research hypotheses

Hypothesis	Regression coefficient	P-value	Result
H0: Engagement has a positive impact on the level of job completion of medical staff ;	0.761	***	Donate
Ha: Part-time has a negative impact on the level of job completion of medical staff;	-0.147	**	Donate

Note: \*\* significance level 1%, \*\*\* significance level 1%.

Source: Processing survey results in 2022

Notably, the age factor has a negative impact on the level of job completion and it is statistically significant (Beta = - 0.168 with P-value = 0.015 < 0.05) (Figure 3). This can be explained by the fact that young health workers are healthier, more resilient, and able to withstand more pressure in the context of the epidemic, so they can complete their work better than the elderly.

Other factors: gender, highest degree, job position, or the average number of shifts per month all result in differences in job completion, but these values are not statistical significance ( $p > 0.05$ ). In other words, the preliminary analysis results show that there is no reliable evidence to say that these factors have an impact on the level of job completion of the medical staff at Thai Thuy hospital.

The data show that the Model Fit: The R2 (normalized) value of the model is 0.563, or 56.3% of the total variation in job completion that can be explained by the exogenous structure.

A relatively common, but very informative, measure that is normalized to the local effect size is Cohen’s  $f^2$  (1988) [40], which allows a measure of the strength of

each predictor variable in solving the problem. prefer the endogenous (dependent) variable. Accordingly, the results from the PLS-SEM model show that the value of  $f^2$  of the factors of Engagement, Contribution and Age is 1,156, respectively; 0.042 and 0.039, indicating that the engagement factor has a very strong impact, while the 2 factors Concurrently and Age have only a moderate impact, on the level of job completion.

#### 4. DISCUSSION

There is no evidence that: the age, seniority, gender of medical staff at Thai Thuy Hospital or whether they have to do many different jobs, have an impact on the “satisfaction, their cohesion”. In particular, the fact that medical staff hold different management positions as well as the average level of hospital duty in a month does not affect the level of “satisfaction and engagement” of medical staff. at this Hospital.

As for the factors affecting the satisfaction of medical staff, the age factor and the number of years of service have a great influence on the level of job satisfaction. This result is similar to a number of studies around the world that show that with increasing age, the level of job satisfaction increases (Ab Rahman, 2019).



The level of satisfaction varies between the surveyed aspects, the lowest average score is 3.89 (Working environment) and the highest is 4.35 points (Direct leaders and colleagues). This average score is higher than a study at Thu Duc District Hospital, with the highest mean score of 3.89 (general hospital satisfaction), and the lowest 3.63 (working environment).

The comprehensive exploration of healthcare workers' engagement, organizational commitment, and job performance, particularly in the midst of the demanding landscape of the mid-career health sector amid the COVID-19 pandemic, has yielded multifaceted insights. Employing a structural equation model, this study meticulously analyzed data gathered from 156 medical staff members at Thai Thuy General Hospital in Thai Binh province.

The primary revelation underscores the paramount importance of cohesive teamwork among medical staff, revealing a positive correlation between heightened cohesion and elevated job completion. This finding resonates with established literature that accentuates the pivotal role of organizational commitment in healthcare settings [20]. The positive interplay between engagement and job performance, noted in various industries [25-27], is particularly crucial in healthcare. Engaged healthcare workers have been proven to contribute significantly to improved business outcomes and enhanced hospital performance [22, 28]. Thus, the empirical support for Hypothesis H0 underscores the imperative of nurturing a culture of engagement among medical staff to bolster job completion.

Concurrently, a noteworthy negative impact of part-time work on medical staff's job completion surfaces in this study. This observation aligns seamlessly with a plethora of literature on multitasking, stress, and health implications [29-34]. In the intricate domain of healthcare, where multitasking is ubiquitous, the detrimental consequences of divided attention on efficiency and accuracy have been well-documented [35]. The substantiation of Hypothesis Ha serves as a clarion call for healthcare administrators to meticulously consider the workload and potential health ramifications associated with part-time responsibilities when managing medical staff.

The intricate interplay of age emerges as another pivotal variable, with younger healthcare workers exhibiting a statistically significant, positive influence on job completion. This finding suggests that the attributes of resilience and adaptability, often associated with younger professionals, play a vital role in navigating the heightened pressure and demands of healthcare roles, especially during the COVID-19 pandemic.

In contrast, other demographic variables such as gender, highest degree, job position, and average number of shifts per month did not yield statistically significant impacts on job completion. While this underscores the unique dynamics at play within Thai Thuy General Hospital, it also hints at the contextual nuances that may influence the generalizability of such findings across diverse healthcare settings.

Drawing on the rich tapestry of these results, the implications for healthcare policymakers and administrators are profound. Recognizing the pivotal role of organizational commitment and acknowledging the potential pitfalls of part-time responsibilities underscore the need for strategic interventions to enhance engagement and mitigate the potential negative repercussions on healthcare service quality, especially in challenging scenarios like the ongoing pandemic.

In conclusion, this study contributes nuanced perspectives on the intricate factors shaping job completion among medical staff. It advocates for tailored strategies to cultivate engagement and address the challenges posed by part-time responsibilities in healthcare settings, with a nuanced consideration of the age factor in team dynamics. The findings offer valuable insights to guide evidence-based decision-making for healthcare administrators and policymakers navigating the complexities of workforce management in the healthcare sector.

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Conclusion

The study was conducted according to a rigorous process, applying superior statistical analysis methods through the use of structural equation modeling (SEM)

to give the most realistic results.

Through structural equation modeling (SEM) shows that both research hypotheses: H0, Ha are supported. This implies that, in the field of health care, regardless of motivation, the more employees are attached to their organization, the better they are at completing the assigned work. At the same time, having to hold multiple jobs will have a negative impact on their work results.

Thereby, the research results once again emphasize the role of motivation for medical staff to connect with the hospital where they work, especially at the grassroots level.

Notably, in the context of the epidemic, young medical staff seem to be able to perform work faster than the elderly.

## 5.2. Recommendations

*Firstly:* Managers, as well as leaders at all levels from the government and professional establishments (Hospitals), need to create a positive working environment for employees to feel they are part of the hospital;

*Second:* Limit and gradually eliminate the situation that medical staff have to take on many jobs, distract them and reduce work efficiency as a result ;

*Third:* There are measures to support health workers, suitable to the characteristics of their work positions so that they are prepared both physically and mentally to cope with uncertain impacts such as the recent pandemic over.

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