

Factors Affecting Work Efficiency of Personnel at The College of Allied Health Sciences

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Abstract

This research aims: 1) To study the performance level at the College of Allied Health Sciences. 2) To study the motivation factors that influence the work efficiency of personnel at the College of Allied Health Sciences. We collected data from a sample of 60 staff members at the Allied Health College using questionnaires and then analyzed the data using descriptive statistics, which included frequency distribution, percentages, and mean values. It was found that 1) the staff at the College of Allied Health Sciences are performing at the highest level (mean 4.18 and 0.82 for S.D.), as shown by their high average workload, high-quality work, and on-time completion; and 2) work responsibility (mean 4.38 and 0.79 for S.D.) and work achievement (mean 4.38 and 0.79 for S.D.) are the things that motivate staff at the highest level to perform at the highest level.

Keywords: Efficiency, Motivational Factors, Personnel

1. Introduction

The College of Allied Health College is an educational institution dedicated to training and developing professionals in health sciences across various fields, such as physical therapy, medical and public health secretary, and other health-related disciplines. With its vision to "be a leader in producing professionals in medical science, health science, and public health," the college commits to achieving excellence in its operations through four key missions: (The College of Allied Health, 2024)

1. The goal is to produce skilled graduates in health and medical sciences who meet national demands and gain international recognition.
2. Providing academic services and disseminating knowledge in health and medical sciences to communities and society to enhance standards across various sectors.
3. Preserving and promoting health service centers, while integrating cultural and artistic knowledge into global standards. (Rungsisawat, 2023).
4. Conducting research to create innovations and knowledge in health sciences to contribute to local development and elevate Thai wisdom to the global stage.

These missions, the college undertakes numerous initiatives and development projects. The staff of the Allied Health College play a crucial role in driving these missions forward and achieving organizational goals. Their performance directly influences the quality of services and the advancement of education. Next, staff development is of paramount importance to ensure the efficient execution of their duties and responsibilities. If the staff perform their roles

effectively, the organizational structure becomes stronger, human resources are managed more efficiently, and a better learning environment is created for students. (Simon, 1960). This aligns with the college's core objective of advancing educational management. Work performance efficiency is a key factor in organizational development, as high-performing personnel maximize potential and help the college meet its objectives. Human resource development is essential for enhancing the capabilities of staff at all levels, both individually and organizationally. Its goal is to improve work processes, enable career progression, and foster skill development. (Kimball, & Norton, 2018). Additionally, it helps minimize work-related risks and strengthens understanding of the college's missions and goals. Effective performance depends on collaboration, dedication, and commitment from the staff. Equally important is job satisfaction, which drives enthusiasm and a proactive attitude, helping the organization achieve its goals and maximize efficiency. (Lange, 2021). To this end, management must prioritize job satisfaction by creating a positive work environment, implementing effective human resource management strategies, and fostering a sense of fulfillment among staff. This ensures smooth operations and the achievement of organizational objectives. Irefer, P., & Mechanic, M. A. (2014). *The Impact of Employees' Commitment on Organizational Performance*

Recognizing these critical factors, the researcher, as a member of the Allied Health College staff, acknowledges the importance of internal organizational dynamics, including motivational factors influencing staff performance. Understanding these factors will help improve and enhance the effectiveness of staff operations in the future, contributing to the college's continued growth and success.

1.1 Research Objective

1. To study the performance level at the College of Allied Health Sciences.
2. To study the motivation factors that influence the work efficiency of personnel at the College of Allied Health Sciences.

2. Literature review

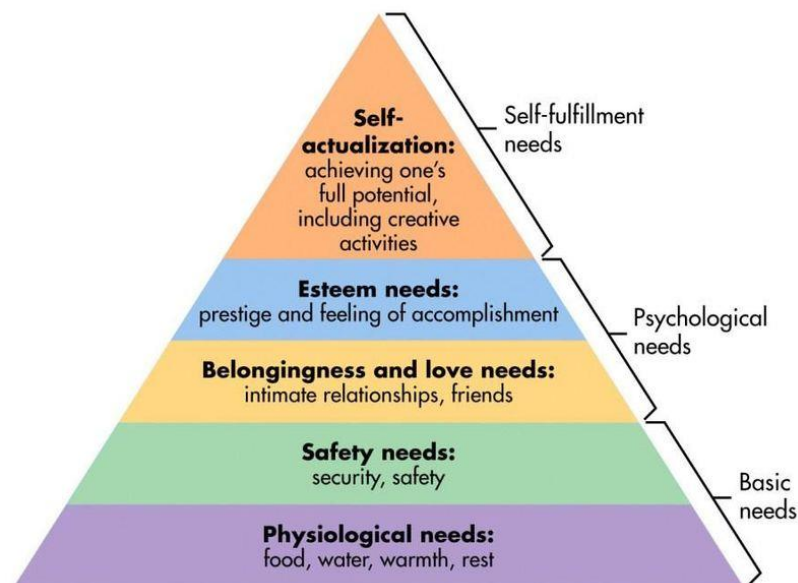
2.1 Concepts and theories about efficiency

The concept of fostering a sense of fulfillment among staff to ensure smooth operations and achieve organizational objectives while emphasizing the dimensions of 1) Quality of Work, 2) Quantity of Work, and 3) Time and Cost has been addressed by various authors and researchers (Peterson & Plowman, 1953). To concern 1) Quality of Work, this dimension assesses the accuracy, standardization, and speed of the work produced, ensuring that both producers and users receive value and satisfaction (Weiwei and Poompichai, 2023), 2) Quantity of Work, this aspect pertains to the volume of work completed, ensuring that the output aligns with organizational expectations and requirements, (Misuttha and Satchakorn, 1996) 3) Time Efficiency, this factor considers the timeliness of task completion, emphasizing the importance of meeting deadlines and optimizing time management to enhance overall productivity. (Blanchard & Johnson, 1982) (Macan, 1994), and 4) Cost, in their situational leadership model, Hersey and Blanchard (2018) emphasized the importance of aligning employee satisfaction and performance with work quality and cost efficiency to meet organizational objectives. So, the cost of performing tasks must be reasonable and aligned with the work. Investments should be kept to a minimum while achieving the most valuable results. We should use financial, labor, material, and technological resources efficiently to minimize waste.

2.2 Concepts and theories on work motivation

Maslow (1954). Abraham Maslow introduces the Hierarchy of Needs, a framework explaining human motivation as a progression through five levels: physiological, safety, love and belonging, esteem, and self-actualization.

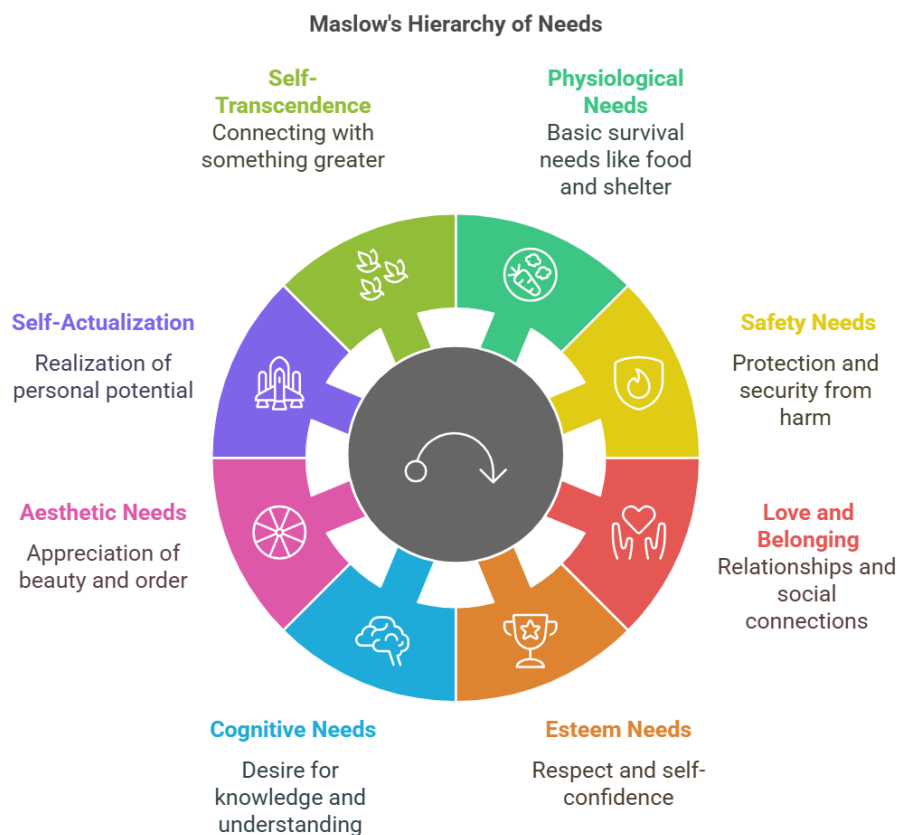
Figure 1 Maslow's hierarchy of needs



Source: Maslow, (1954)

Maslow (1980). Added to incorporate cognitive needs, aesthetic needs, and self-transcendence to enhance our understanding of human motivations. At the base of the hierarchy are physiological needs, which are essential for survival, such as food, water, and rest. These are followed by safety needs, which involve security, stability, and protection from harm. The next level, love and belonging needs, highlights the importance of relationships, intimacy, and social connections. As we progress, we divide esteem needs into two categories: lower esteem, which involves recognition and status, and higher esteem, which involves self-respect and independence. The newly added cognitive needs emphasize the human desire for knowledge, exploration, and understanding, while aesthetic needs focus on the appreciation of beauty, order, and harmony. Self-actualization, at the top of the hierarchy, entails realizing one's potential and achieving personal growth. Finally, the concept of self-transcendence surpasses self-actualization, where individuals seek to connect with something greater than themselves, such as altruism or spirituality.

Figure 2 Maslow's hierarchy of needs



Source: Maslow, (1980)

Herzberg (1979) explains workplace motivation through two categories of factors: hygiene factors and motivators. Hygiene factors, such as salary, job security, working conditions, company policies, and interpersonal relationships, prevent dissatisfaction but do not inherently motivate employees. On the other hand, motivators, such as recognition, achievement, responsibility, advancement, and the nature of the work itself, directly drive job satisfaction and improved performance. Herzberg emphasized that addressing hygiene factors alone is insufficient; true motivation stems from real motivators linked to personal growth and fulfillment. While hygiene factors establish a baseline for satisfaction, motivators create engagement and productivity. This theory highlights that eliminating dissatisfaction and fostering motivation require different strategies. (Kerdpitak, 2020). Widely applied in management, it informs role design and workplace environments management that encourage satisfaction and performance.

3. Methodology

This research is a quantitative study aimed at investigating the factors affecting the work efficiency of personnel at the College of Allied Health Sciences. Collected data by administering questionnaires to a sample of 60 individuals. We used questionnaires to collect

personnel data, determining the sample group based on Yamane's formula (Yamane, 1973). The research instrument was a questionnaire that consisted of three parts.

Part 1: Demographic information about the personnel at the College of Allied Health Sciences includes gender, age, education level, type of work, and length of service. (Smith & Jones, 2019).

Part 2: The impact of personnel performance on work efficiency at the College of Allied Health Sciences (Laksana, 2010).

Part 3: Motivational factors for work about work motivation factors.

3.1 To develop a process for developing research tools

1. Study the documents and articles related to the research framework to gain knowledge and understanding of the factors affecting the performance of the College of Allied Health Sciences personnel.

2. Review the design and application of research tools from books, documents, articles, journals, and related studies to guide the development of a questionnaire suitable for this research.

3. Process the information gathered from the study to define the structure and scope of the research tool, ensuring it comprehensively covers topics related to the factors influencing the performance efficiency of personnel at the College of Allied Health Sciences across all variables of interest to the researcher.

3.2 data collection

1. The researcher requested an official permission letter to seek assistance in collecting research data. This will involve requesting approval from the Dean of the College of Allied Health Sciences to gather data from the personnel of the college, who serve as the target group or sample group for providing information and responding to the questionnaire.

2. Data collection will be conducted using an online questionnaire created via Google Forms.

3. Once the researcher receives the completed questionnaires, they will verify the accuracy and completeness of the responses. Subsequently, the data will be analyzed and processed further.

3.3 Data analysis, various statistical methods used

The data analysis for this research study was conducted using the Statistical Package software. The analysis process was divided into the following steps:

1. Data Preparation: The researcher reviews the returned questionnaires to verify their accuracy and completeness. The collected data is then coded and entered into the SPSS program for subsequent analysis.

2. Statistical Data Analysis: This research is a quantitative study focusing on the factors affecting the performance of personnel of the College of Allied Health Sciences. The researcher has identified the statistical measures to be used for data analysis as follows:

2.1 To describe the characteristics of the sample group, such as gender, age, education level, type of work, and length of service, by percentage.

2.2 To analyze the level of work performance efficiency of the Allied Health College staff using mean and standard deviation.

2.3 To examine the factors influencing the work performance efficiency of the staff through multiple regression analysis.

4. Results

The demographic information is female, aged between 31 and 40 years, with an educational qualification above a bachelor's degree. She is part of the academic staff, indicating a role in education or academia. With a work experience of 5–10 years, she likely possesses significant professional expertise and practical knowledge in her field. This combination of age, education, and experience suggests a career stage where she is consolidating her skills, advancing in her profession, and possibly taking on more specialized or leadership responsibilities within the academic setting as follows in Table 1.

Table 1 Demographic Information.

Demographic Information	Percentage
Female	67.67
Age between 31 - 40 years	55.00
Education Above Bachelor's Degree	68.33
Academic Staff	66.67
Work Experience between 5 – 10 years	40.00

The analysis of personnel work efficiency highlights four key aspects: quality of work, rated at 4.27 with a "highest" efficiency level; quantity of work, rated at 4.33, also at the "highest" level; time, rated at 4.10, indicating "highest" efficiency; and cost, rated at 3.64, reflecting "high" efficiency. The overall efficiency score is 4.24, categorized as "highest," showcasing excellent performance across most areas, with slight room for improvement in cost management as follows in Table 2.

Table 2 Work performance efficiency

Work efficiency of personnel	\bar{X}	S.D.	Level
1. Quality of work	4.27	0.74	Highest
2. Quantity of work	4.33	0.58	High
3. Time	4.10	0.73	Highest
4. Cost	3.93	1.08	High
Sum	4.18	0.82	Highest

The analysis of motivational factors for work reveals that work responsibility (4.87) and work achievement (4.80) are the highest-rated motivators, reflecting their critical importance. Career advancement (4.28) and recognition and respect (4.23) also receive high ratings, demonstrating their significant impact on motivation. The rating for the creative and challenging nature of work (3.71) is slightly lower but still significant. Overall, with a combined score of 4.38, these factors are categorized at the "highest" level, emphasizing their role in fostering employee motivation and performance as follows in Table 3.

Table 3 Work motivation factors

Motivational factors for work	\bar{X}	S.D.	Level
1. Work Achievement	4.80	0.40	Highest
2. Recognition and Respect	4.23	0.73	Highest
3. Creative and Challenging Nature of Work	3.71	0.94	High
4. Work Responsibility	4.87	0.36	Highest
5. Career Advancement	4.28	0.71	Highest
Sum	4.38	0.79	Highest

5. Conclusion and discussion

5.1 The demographic data aligns with the findings of Smith & Jones' 2019 research. So, the data was shown a female aged 31 to 40 years, holding an educational qualification above a bachelor's degree. As a member of the academic staff, she plays a role in education or academia. With 5–10 years of work experience, she has likely developed considerable professional expertise and practical knowledge in her field. This combination of age, education, and experience indicates that she is at a career stage focused on consolidating her skills, advancing professionally, and potentially taking on specialized or leadership responsibilities within her academic domain.

5.2 The overall efficiency score of 4.24 is categorized as "highest," demonstrating strong performance across most areas, with minor opportunities for enhanced cost management. The analysis of personnel work efficiency focuses on four key aspects. Quality of work is rated at 4.27, reflecting a "highest" level of efficiency, while quantity of work achieves an even higher score of 4.33, also categorized as "highest." Time efficiency is rated at 4.10, maintaining the "highest" efficiency level, agreeing with Peterson & Plowman (1953) and Hersey and Blanchard (2018), which mention cost management. In contrast, cost efficiency is rated at 3.64, indicating a "high" level but suggesting potential for improvement.

5.3 The study of what motivates people supports Maslow's (1980) and Herzberg's (1979) theories, which say that work responsibility (4.87) and work achievement (4.80) are the most important factors, showing how important they really are. Career advancement (4.28) and recognition and respect (4.23) also receive high ratings, reflecting their significant contribution to employee motivation. Despite receiving a slightly lower rating of 3.71, the creative and challenging nature of work continues to be a significant factor. We categorize these factors at the "highest" level, emphasizing their essential role in driving employee motivation and performance, with an overall score of 4.38.

Summary of research results

The results of the research on the factors influencing the work performance efficiency of personnel at the College of Allied Health Sciences indicate the highest level of efficiency. This reflects that the college recognizes the importance of work performance and increasingly emphasizes motivation in order to achieve successful management. By responding to the needs of personnel within the college, it also meets the college's objectives. The creation of work motivation within the college will lead to the achievement of desired goals and progress. Personnel will dedicate their energy and abilities fully, without tiring, to ensure the success of the work in line with the policies and objectives. Furthermore, there are individuals who believe that motivating employees to work toward advancement helps foster personal development,

leading to a meaningful life and success. Work, as a part of human life, adds value to life and helps in the development of individuals as well.

6. Acknowledgment

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