

Healthcare Technology Management: Significance of Artificial Intelligence on Work Engagement Among Healthcare Practitioners

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ABSTRACT

The digital economy and technical development is growing more quickly and Artificial Intelligence (AI) is one such technology that is becoming more common in the healthcare industry. In addition to improving patient care, AI-based solutions are anticipated to improve the work engagement of healthcare providers.

Keywords: Healthcare technology management, artificial intelligence, work engagement, healthcare practitioners.

1. INTRODUCTION

AI tools and systems in healthcare has many positive outcomes, including diagnosing patients more rapidly and accurately (Harrison, 2018; Serag *et al.*, 2019). These Artificial Intelligence tools aids not only in terms of medical, but also in the healthcare management too, for example, as reported by The Star, at the recent Malaysia Technology Excellence Awards, Gleneagles Kuala Lumpur received the Medical Technology - Healthcare Accolade for its effective use of robotic process automation (RPA) to resolve significant issues with hospital bill payments and optimize its finance operations.

Previous research indicates that healthcare workers are more likely to be disengaged, to be indirectly distracted, and to refuse to use artificial intelligence—despite feeling that it is their duty to guarantee the proper application of AI-enabled systems in the provision of healthcare (Fan *et al.*, 2018; Shinnars *et al.*, 2019). Schaufeli and Bakker (2011) as cited in Polona Szilvassy & Klemen Širok, (2022), defined work engagement as a fulfilling, pleasant mental state associated with one's work that is marked by vigor, dedication, and immersion. High amounts of energy and mental toughness while work are traits of vigor.

Being deeply engaged in one's work and feeling a sense of significance and enthusiasm are considered traits of dedication. A person who is completely focused and joyfully immersed in their activity is said to be absorbed. Encouraging positive work attitudes and behaviors is essential in the healthcare industry, which is a highly competitive and demanding field with limited resources and rising job demands (Polona Szilvassy & Klemen Širok, 2022).

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Figure 1. Research Framework.

2. METHODOLOGY

Table 1 Methodology

Criteria	Items
Study Design	Quantitative Method
Sampling Technique	Convenience Sampling
Sample Size	30 respondents
Analysis	SMART PLS Software

A validated self-administered questionnaire is utilized to gather data. It is an effective and affordable strategy; a survey questionnaire was delivered to healthcare personnel totally at random in order to collect data for this study. The questionnaire often allows for a review of the results and gives respondents plenty of time to think things through before answering. Respondents must adhere to the specific guidelines provided in the questionnaire. Every statement and question was constructed as a closed-ended question, meaning that there was only one fixed response option available for each topic. With registration ID NMRR ID-23-01713-ASK, the Medical Research and Ethics Committee (MREC) has granted approval.

3. RESULTS AND DISCUSSION

Table 2 Results of Correlation

Variables	No. Of Item	Cronbach's Alpha	Indications
WE	10	0.619	Acceptable

*WE indicate Work Engagement

As per a widely accepted interpretation of the coefficient, dependability is indicated by values less than 0.5, good dependability is shown by values between 0.5 and 0.8, and excellent dependability is indicated by values greater than 0.8. Since all of the aforementioned Cronbach Alpha values are higher than 0.5, the queries are appropriate and, therefore, dependable (Ekolu & Quainoo, 2019)

4. CONCLUSION

The study initiates new research directions and adds extensively to the body of existing material. This research showed that healthcare workers are more engaged at work and that the resources provided such as Artificial Intelligence tools are crucial to this work engagement.

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