Evaluation of Medical Artificial Intelligence Readiness Levels of Bezmialem Vakif University Medical Specialization and Faculty of Medicine Students

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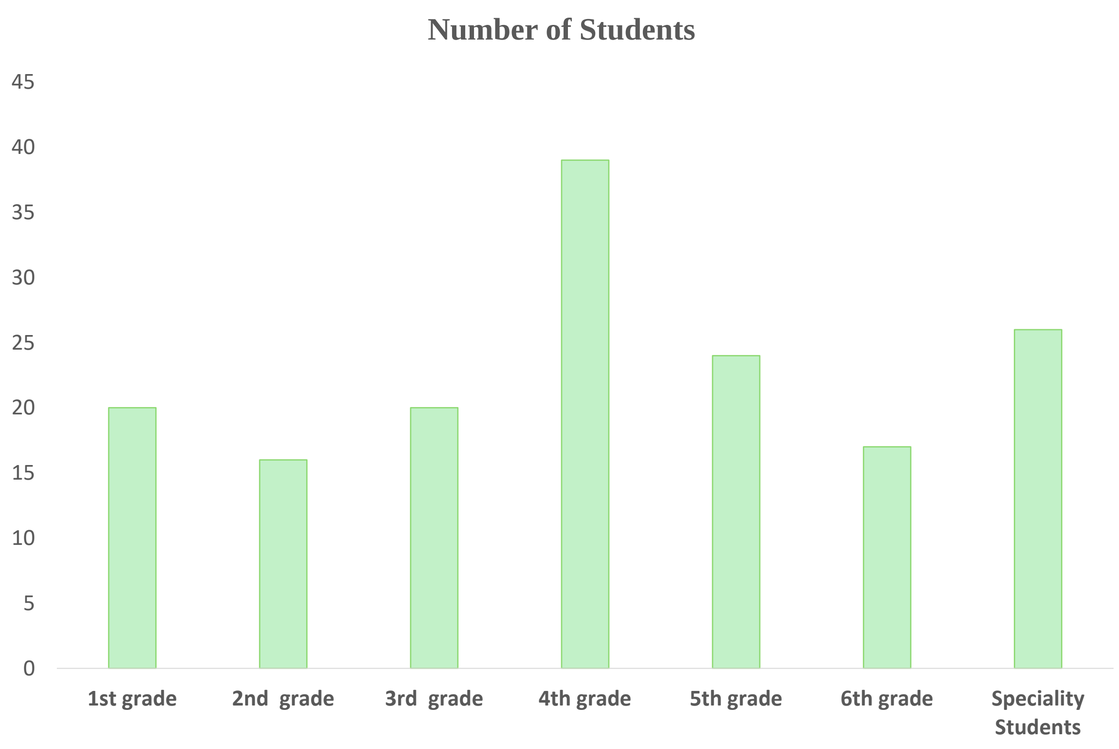
INTRODUCTION

Artificial intelligence is used to improve diagnostic processes in the healthcare field, playing an essential role in imaging, echocardiography, and the detection of neurological diseases. However, training in artificial intelligence remains insufficient within the curricula of medical faculties. Evaluating readiness levels will be beneficial in determining the educational curriculum for these competencies. This study aimed to assess the readiness levels for artificial intelligence among medical faculty and specialty students at Bezmialem Vakif University.

METHOD

The study included medical faculty and specialty students. The "Medical Artificial Intelligence Readiness Scale" was administered online via Google Forms. The scale consists of four subgroups: cognitive, skill, predictive, and ethical factors, and it is evaluated on a total of 110 points. The high score obtained means that the medical artificial intelligence readiness is also high. A power analysis determined that the minimum sample size should be 162. The data were analyzed using SPSS 21.

Graphic 1. *Distribution of participants by education level*



RESULTS

The responses of 162 participants (Graphic 1) revealed average scores of 24.91 out of 40 for the cognitive factor, 29.64 out of 40 for the skill factor, 10.69 out of 15 for the predictive factor, and 10.92 out of 15 for the ethical factor. The overall score was 76.15 out of 110 (Table 1). No significant difference was observed between class levels and specialty students (p = 0.569).

Table 1. *Average scores by scale subgroups*

Factors	Average score
Cognitive Factor	24,91/40
Skill Factor	29,64/40
Predictive Factor	10,69/15
Ethical Factor	10,92/15
Overall	76,15/110

CONCLUSION

The study showed that the overall readiness levels for artificial intelligence among medical faculty and specialty students at Bezmialem Vakif University were moderate. These findings highlight the need for incorporating comprehensive artificial intelligence training programs into medical education to ensure that future healthcare professionals are well-prepared for advancements in medical technologies.

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