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Education and Al Reliance: Differences in Recommendations, Habits, and Usage

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Introduction

As AI becomes increasingly integrated into daily life, it is crucial to understand how individuals with diverse educational backgrounds engage with these technologies. Does education level influence reliance on AI recommendations? Are there disparities in the use of AI for predictions and assistance? Do individuals with higher education form AI-related habits more readily? This study addresses these questions to inform inclusive AI design and educational initiatives.

Methods

Study Design: Cross-sectional survey research design.

Participants:

- N = 66 adults (18-65 years old).
- Recruited through online advertisement and personal networks.

Measures:

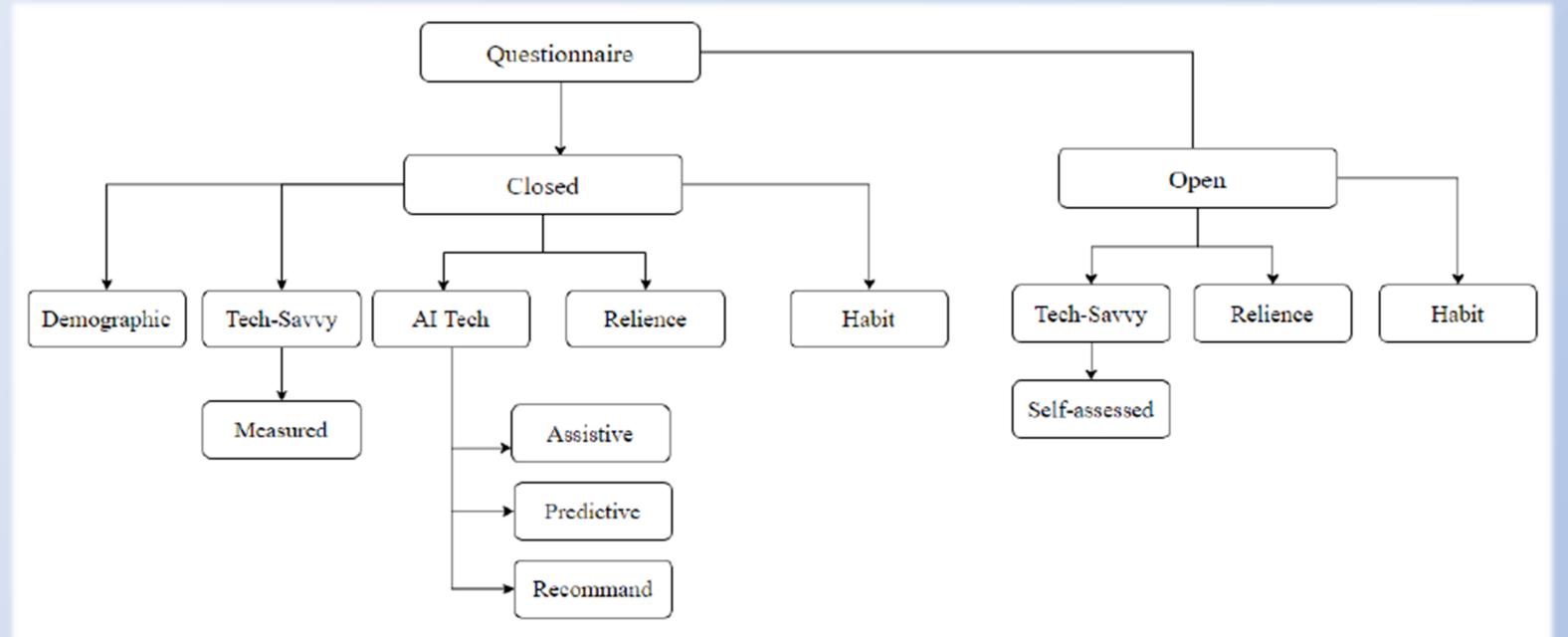


Figure 1: The questionnaire format used in the current study.

- Education Level: Highest degree attained (e.g., College, Bachelors, Masters, PhD).
- AI Reliance: Self-report measures on a 1 to 7 Likert scale across several domains:
 - •Recommendations (products, media, content)
 - Predictions (e.g., autocomplete, personalized feeds)
 - •Assistance (e.g., Siri, Alexa)
- Habit Formation: Frequency of using AI features in daily routines.
- Figure 1 showing a flowchart of different questionnaire sections.

Analysis: One-way ANOVA to examine group differences based on education level. Pearson correlations assessed relationships between education and AI reliance measures, post-hoc Tukey HSD tests examined specific group differences in recommendations.

20.00

Simple Boxplot of Reccom_score by Education

25.00

Simple Boxplot of Pred_score by Education

Table1:Relience on AI varies on different level of Educations

Education Level	Mean	Std. Deviation	Significant Score	
HS	22.00	-	-	
College	48.50	3.53	*	
Bachelor	63.23	18.53	**	
Master	79.31	16.11	***	
PhD	56.00	5.65	**	

(Note: * p < .05, ** p < .01, *** p < .001)

Discussions

• The current study provides evidences (e.g., Table 1, Figure 2) that education level influences the extent to which individuals rely on AI recommendations. Those with higher education were more likely to utilize AI-powered suggestions for content, products, or services.

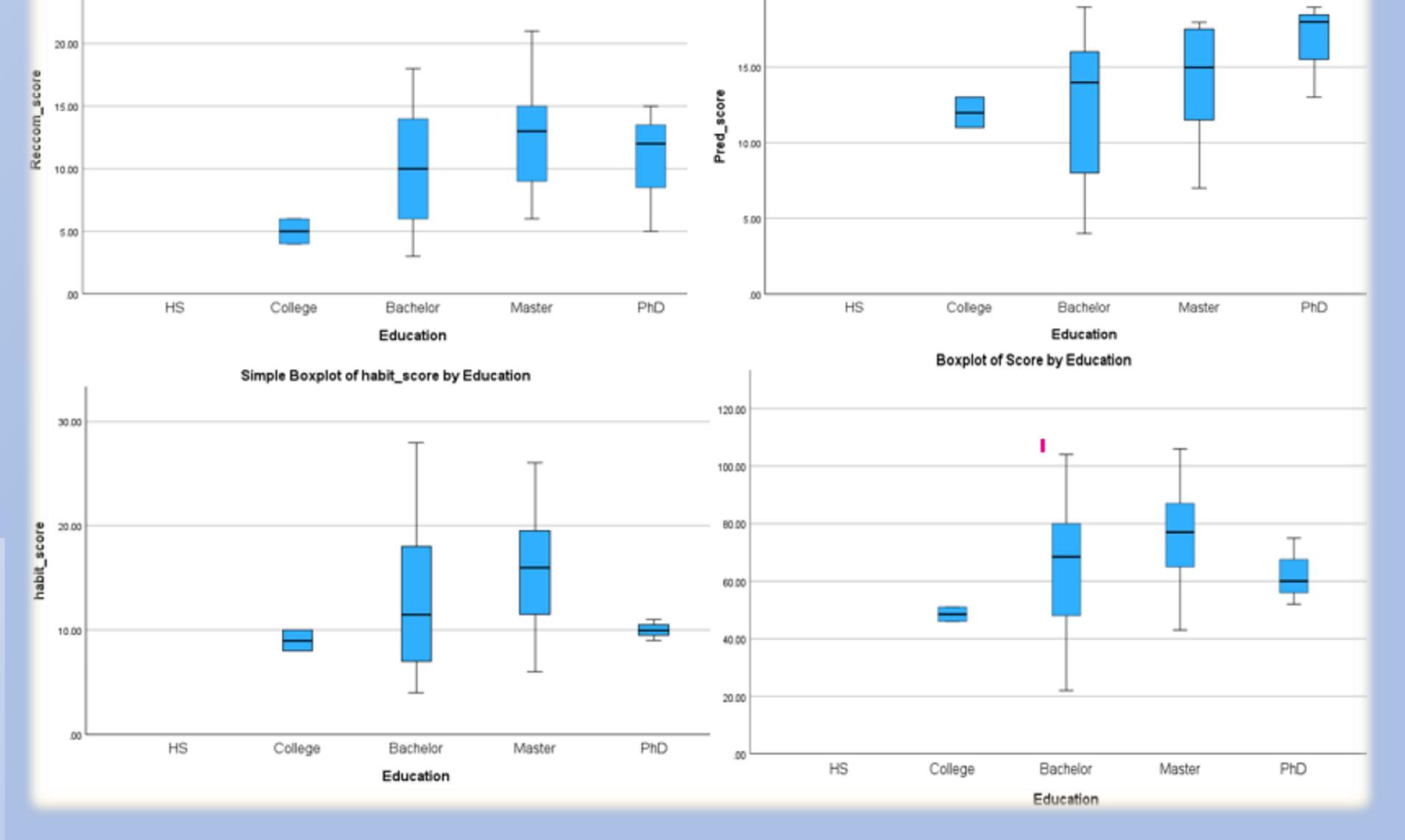


Figure2: Shows the 4 Boxplots of participant's scores in the respective sections based on their level of education

- Education did not significantly impact reliance on basic AI features for prediction or assistance, suggesting that these functionalities might be adopted more uniformly.
- Exploring the motivations and experiences of individuals across different education levels will help design AI interfaces that resonate with a broader audience.
- Further research is needed to understand the reasons behind this link between education and trust in recommendations.

Conclusions

- Disparities in AI adoption could deepen existing social and economic inequalities.
- Efforts to promote AI literacy should extend across all educational levels, empowering individuals to confidently navigate and benefit from these technologies.
- The development of AI systems that cater to diverse user needs and experiences is essential for preventing an emerging AI adoption gap.

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• Through proactive education and thoughtful design, we can ensure that AI serves as a positive force for everyone, regardless of their educational background.