Natural Nootropics on Campus: Insights into Usage Patterns and Influences Among Alfaisal University's Medical and Pharmacy Students

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Introduction

- Cognitive enhancement strategies, such as the use of nootropics, are employed to boost learning, memory, attention, and vigilance (1).
- Healthcare students may turn to these cognitive enhancers to improve academic performance, with natural or herbal nootropics being particularly accessible (2).
- This study aimed to assess the prevalence and attitudes toward "*natural*" nootropics among undergraduate medical and pharmacy students at Alfaisal University.

Methods

- A preliminary cross-sectional survey was conducted among medical and pharmacy students at Alfaisal University (total *n* = 64; aged 18–24).
- Participants completed a structured questionnaire assessing demographics, prior knowledge, and consumption patterns of natural nootropics, motivations for use, academic stress, and mental health history.
- Descriptive statistic were reported and predictive factors for nootropic use were analyzed using Fisher's exact test.

Results

- Most participants were female medical students (**Fig. 1**).
- Only 25% were aware of nootropics, used mainly to reduce fatigue, boost energy, and/or enhance study focus (**Fig. 2**).
- Omega-3 fatty acids were the most common natural nootropic (**Fig. 3**).
- High academic pressure and stress were prevalent (**Fig. 4**).
- Anxiety was the most common mental health condition reported (**Fig. 4**).
- No significant predictors of natural nootropic use were identified (**Table 1**).

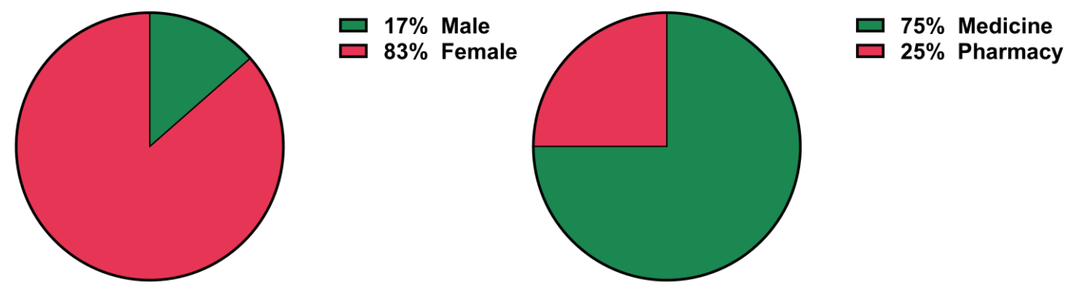
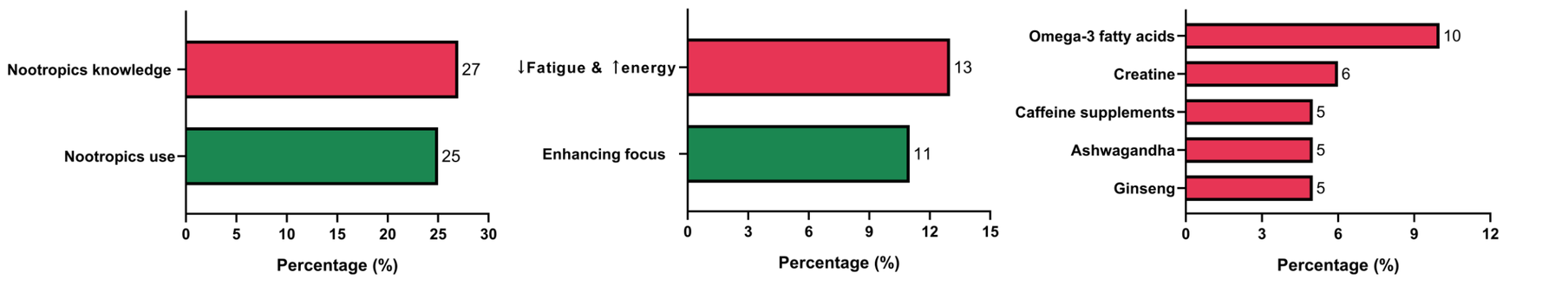


Fig (1): Gender distribution (*left panel*) and distribution of participants across healthcare programs (*right panel*).

Fig (2): Knowledge and use of natural nootropics among participants (*left panel*), common reasons for nootropics use (*middle panel*) and most common natural nootropics identified among study participants (*right panel*).



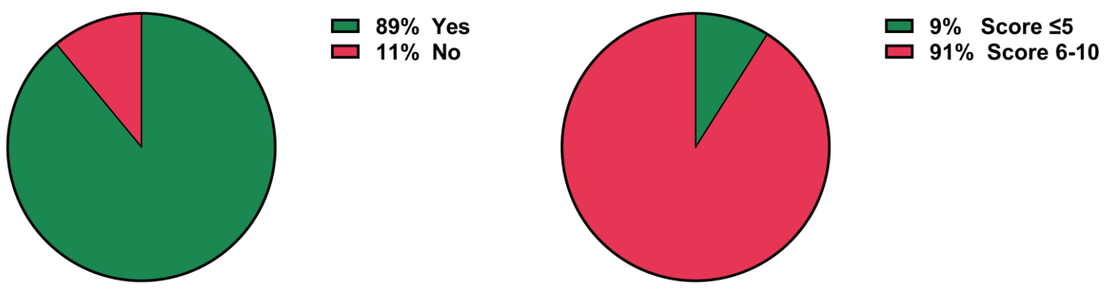


Fig (3): Reported academic pressure among study participants (*left panel*), their stress scores (*middle panel*) and scores distribution presented as a heatmap (*right panel*).

Table (1): Analysis of predictive factors of natural nootropics use

Predictor factor	*P*-value	Significance
Gender	>0.999	Not significant
Study program	0.317	Not significant
Prior nootropic knowledge	0.102	Not significant
Academic pressure	0.669	Not significant
Stress level	>0.999	Not significant
Mental health conditions	0.774	Not significant

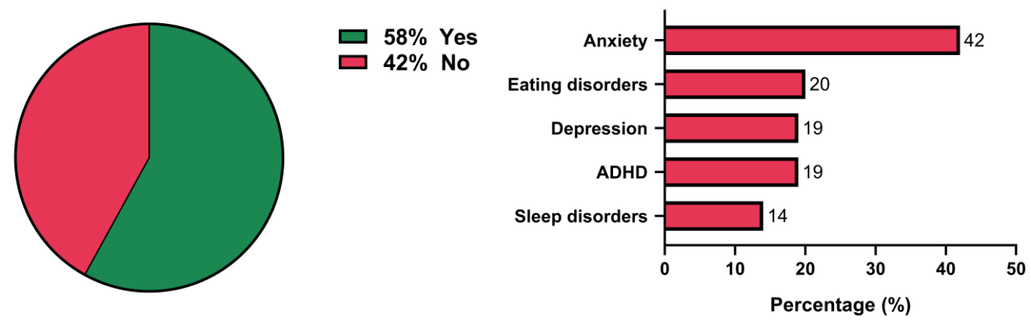


Fig (4): Presence of mental health conditions (*left panel*) and types of conditions reported among study participants (*right panel*).

Conclusion

- The use of natural nootropics appears to be primarily driven by motivations related to energy enhancement and focus rather than demographic or academic pressures.
- These findings emphasize the need for further exploration into the motivations and perceptions surrounding nootropic use among students.

References

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2. Merwid-Ląd, A., Passon, M., Drymluch, P., Głuszyński, M., Szeląg, A., & Matuszewska, A. (2023). Do Medical Universities Students Use Cognitive Enhancers while Learning?-Conclusions from the Study in Poland. *Life* (Basel, Switzerland), 13(3), 820.

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