

## Global Congress on Integrated Healthcare

A joint Conference in Collaboration with United Research Forum, UK and Mutah University, Jordan

Under The Patronage of his Excellency Dr Yousef Goussous

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### Prevalence of left-right confusion among medical students in Mutah University, Al-Karak, Jordan

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#### Abstract

**Background :** The ability to distinguish left from right has been shown to vary substantially within healthy individuals, yet its characteristics and mechanisms are poorly understood.

**Objective:** The study was designed to spot the extent of left-right confusion (LRC) among medical students at Mutah university and to investigate the relationship between LRC and multiple health and socioeconomic variables.

**Method:** In this cross-sectional study, a Google form questionnaire was designed and distributed among a convenience sample of medical students from 1st year to 6th year.

The collected data were statistically analyzed using SPSS version 25

**Results:** Prevalence of LRC was found to be 9.6% among participants (12.6% of females, and 5.8% males, p-value= 0.004), of these participants, 21.3% reported needing less than 2 seconds to distinguish, 67.2% reported needing 2-4 seconds, and 11.5% reported needing more than 4 seconds to distinguish.

As for the relationship between LRC and the dominant hand (86.6% of participants are right-handed, 9.6% are left-handed, and 3.8% are ambidextrous), 8.9% of right-handed participants have LRC while 16.4% of left-handed have LRC (p-value= 0.165).

ADHD persons among participants proved to be 1.7% (11 cases, 45% of them have LRC, p-value <0.001). 27.9% of participants who have LRC were academically affected by having LRC, especially with regard to anatomy and radiology courses.

**Conclusion:** In conclusion, LRC proved to be present among our sample in similar prevalence to previous literature worldwide at 14.7%, the data suggests that LRC is associated with gender and ADHD. Further investigation about the correlation between LRC and other variables (i.e., diseases, diet, smoking, exercise) needs to be done.

**Keywords:** left-right confusion, Al-Karak, prevalence, Mut'ah University, Medical student, Gender, ADHD



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### Biography

I am a third-year medical student at Mutah University, Jordan, and this paper marks my first experience in conducting a study. Nevertheless, the field of academics and research has been my passion for years, as I find great joy in investigating concepts and seeing them through the lens of research. I have Two- years of experience teaching medical lectures online and more than 6 years of experience as a presenter of various events, as well as 3 years of experience as an editor for magazines in university and high school. Academically, I ranked 3rd place in Jordan for Best across 7 Cambridge IGCSE qualifications in 2017, and had the highest GPA in the faculty of Medicine at Mutah University in 2019/2020. In the future, I hope on expanding my academic horizons by conducting research that positively impacts the world, and I wish to help more students throughout their journey by teaching.