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## INTRODUCTION

Energy drinks have been around since 1949 (Alsunni, 2015), but have recently become a popular way to stay awake or study for big tests. As more people have started consuming these drinks there has been a noticeable rise in anxiety and other mental health concerns over the past few years. As we have explored and researched energy drinks, we can see the many factors that show how energy drinks are negatively impacting physical and mental wellbeing of a person and their development.

## ABSTRACT

With the popularity of energy drinks rising in the past years, it has been targeted towards younger audiences. The consumption of artificial caffeine before the brain is developed can negatively impact cognitive abilities. Not knowing what makes up the energy drinks, how caffeine dependency works or what it can do to other body systems could lead to health issues for people who drink lots of energy drinks in their youth. We are looking into some of the impacts of energy drinks on high school and college students. Our data was collected through previous research. The main use of these drinks is staying awake when tired. Whether from a late night studying or gaming with friends many people the next day turn to energy drinks to make it through the day. The results of regular consumption can lead to major health impacts such as heart attacks. We hope that presenting this data to people in our age range will bring notice to the impacts of frequently drinking energy drinks.

## OBJECTIVES

The objectives of this research are to bring attention to the effects that energy drinks have on an undeveloped brain. We hope to help those who consume these drinks realize how they are impacting the. We hope to not only inform but to educate and start to lower the consumption rate of these energy drinks.

## METHODS

- Analyzing available data from scientific publications
- Using research from Sarah Bull, Terry Brown, Karin Burnett, Lini Ashdown, Lesley Rushton. As well as Rita Soós, Ádám Gyebrovszki, Ákos Tóth, Sára Jeges and Márta Wilhelm

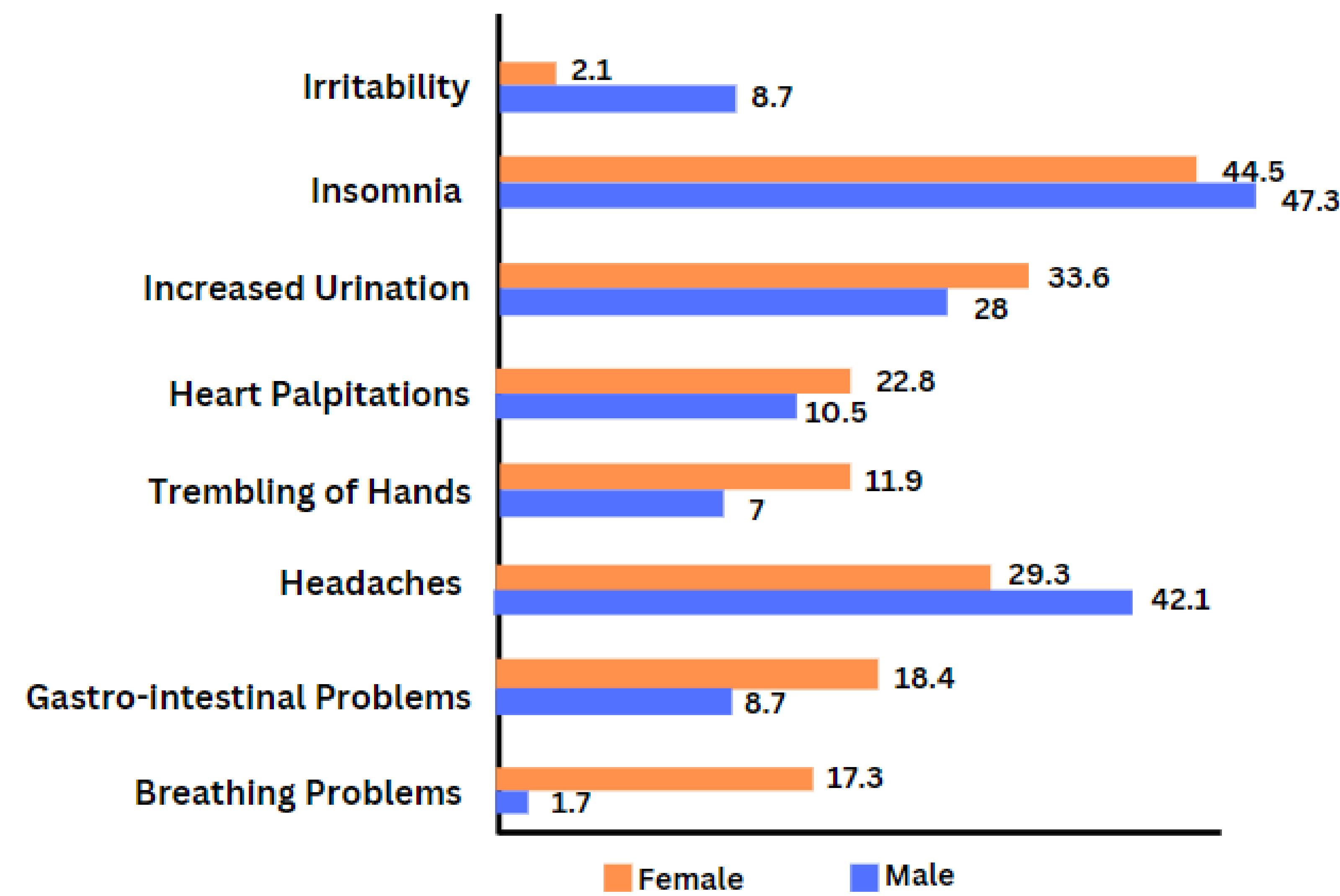


Figure 1. Caffeinated beverages and energy drink: pattern, awareness and health side effects among Omani university students. - Scientific Figure on ResearchGate. Available from: [https://www.researchgate.net/figure/Health-side-effects-of-energy-drink-consumption-among-participants-p005-is\\_fig3\\_334907705](https://www.researchgate.net/figure/Health-side-effects-of-energy-drink-consumption-among-participants-p005-is_fig3_334907705) [accessed 17 Mar, 2023]

## RESULTS

- Increased blood pressure and heart rate
- Disturbed neurodevelopment
- Memory issues
- Insomnia and headaches
- Increase in anxiety and depression
- Brain fog

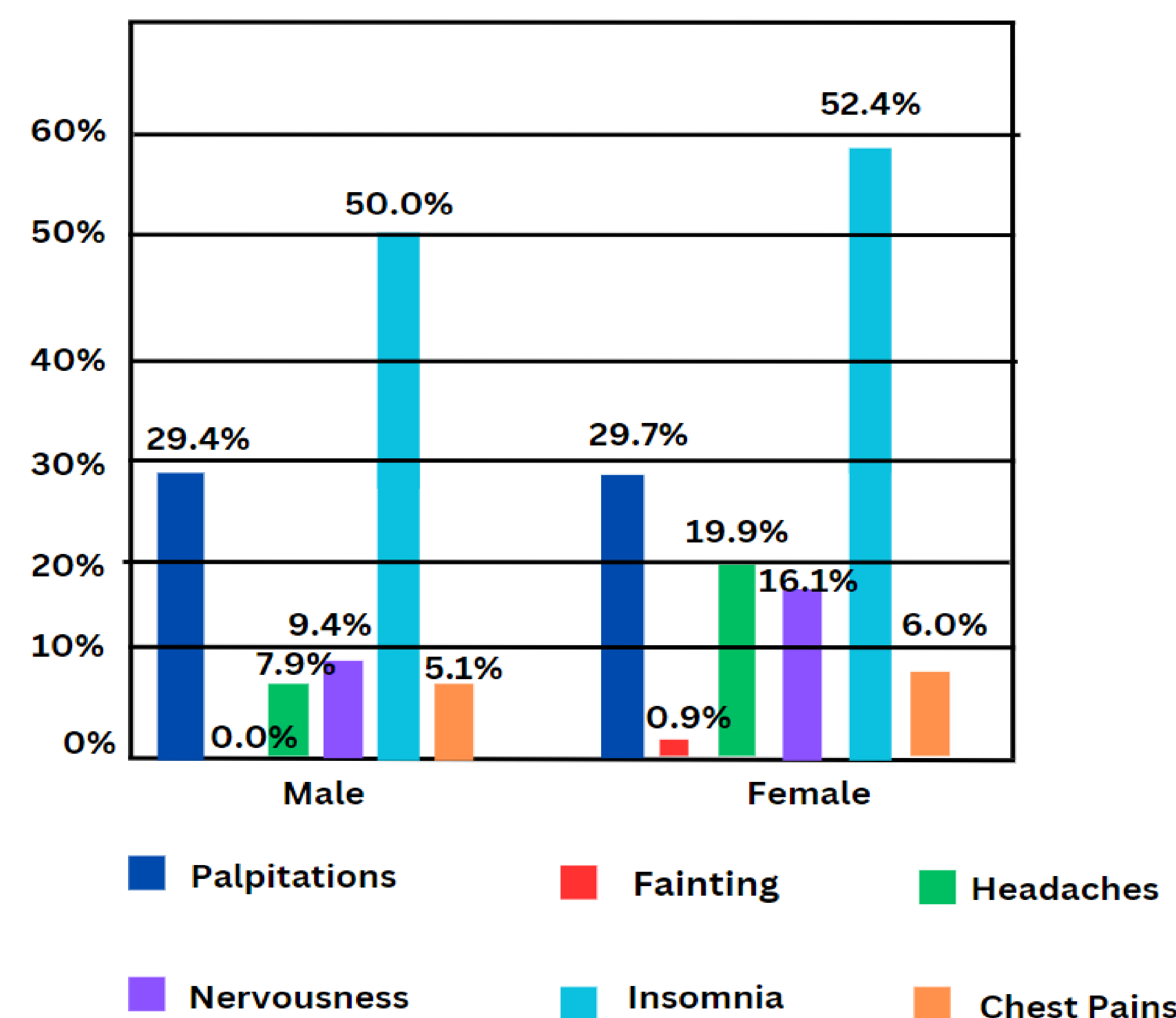


Figure 2. Orimoloye, Adeyinka & Hurlock, Lisa & Ferguson, Trevor & Lee, Michael. (2013). Pattern of Energy Drink Consumption and Associated Adverse Symptoms among University Students. *British Journal of Medicine & Medical Research*. 3. 1900-1909. 10.9734/BJMMR/2013/4162.

## CONCLUSIONS

Our view that energy drinks and the impact they have on the brain was confirmed. We have conducted a literary review where we are confident that our results would be similar if we did. We currently have only used previous research to explore our concerns, but we hope to continue our ideas by conducting our own research, where we explore a narrower idea of how energy drinks effect humans and brain development.



## FUTURE WORK

- Energy drink affects in sports
- Training time in respect to energy drink consumption
- Negative effects in different sports
- Enhancing performance in sports

## References

- Bull S. et al., 2015. Extensive literature search as preparatory work for the safety assessment for caffeine. *EFSA Supporting Publication* 2015;12( 1):EN-561, 98 pp. doi:10.2903/sp.efsa.2015.EN-561
- Soós, Rita, et al. "Effects of Caffeine and Caffeinated Beverages in Children, Adolescents and Young Adults: Short Review." *MDPI, Multidisciplinary Digital Publishing Institute*, 25 Nov. 2021, <https://www.mdpi.com/1660-4601/18/23/12389>.
- Alsunni A. A. (2015). Energy Drink Consumption: Beneficial and Adverse Health Effects. *International journal of health sciences*, 9(4), 468–474.