

## Studying the Relation between Blood Glucose Levels and the Fear of Rides: An Analysis to evaluate the Fluctuations in Blood Sugar Level Influencing the Psychological Reactions during Riding

Muhammad Imran Qadir<sup>1\*</sup> & Alishba Rasheed<sup>2</sup>

<sup>1,2</sup>Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan.  
Corresponding Author (Muhammad Imran Qadir) Email: [mrimranqadir@hotmail.com](mailto:mrimranqadir@hotmail.com)



DOI: <https://doi.org/10.46759/IIJSR.2024.8409>

Copyright © 2024 Muhammad Imran Qadir & Alishba Rasheed. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Article Received: 09 October 2024

Article Accepted: 15 December 2024

Article Published: 23 December 2024

### ABSTRACT

The present investigation is done in order to get knowledge about the association between blood glucose level and phobia of rides. About 130 disciples of Baha Uddin Zakariya University took part in this investigation. Blood sugar level monitoring is very necessary as glucose is responsible for various metabolic activities happening in the body. Fear of dragon boat is the amalgam of various other kinds of phobias like acrophobia and claustrophobia. Questionnaire was distributed among subjects and the results were analyzed later.

**Keywords:** Rides phobia; Survey; Blood sugar concentration; Blood glucose level; Fear of rides; Stress response; Fear response; Physiological reactions; Ride-induced fear; Emotional affiliations; Hormonal response to fear.

### 1. Introduction

In humans, the quantity of sugar associated with blood refers to the level of blood sugar or glucose concentration [1],[2]. Normally, the actual amount of sugar present in the body of a normal weighing person is supposed to be four grams, which is present in the body for sure all the time. Blood sugar plays very important role in maintaining the homeostasis of body. The level of blood glucose fluctuated during the different phases of the days. For example, it is lowest early in the morning and highest after the intake of any meal. Variations in the intensity of blood glucose cause medical issues. Both its high concentration and depleted amount are harmful for health. There can be many reasons such as genetic variation, bad health implication and environment [3],[4]. Blood level of glucose can be measured using certain kind of medical devices. In humans the level of sugar is controlled with the help of hormones. Pancreases are the source of this hormone.

Fear of Dragoon Boat kind of rides describes the fear of an individual who are afraid of heights, close rooms and dark places. It causes dizziness, nausea and safety issues. Phobias are related to thinking of people. If a person, who is afraid of such kind of rides, overcomes his own inner fears then these kinds of phobias can be treated very easily. As there is no need of fear because all such kind of rides are made considering the health restrictions. These kind of fears are not necessarily innate but can be developed with the passage of time after the happening of any tragic incident. Panic attacks can also be the symptom of such fears. This fear is similar to the phobia of airplane flight. People develop the fear of falling. It can be treated by using certain breathing techniques and anxiety releasing strategies [5],[6].

#### 1.1. Study Objectives

The key purpose of this study was to evaluate the connection between phobia of rides and the level of blood sugar concentration. However, the following were also the objective the present study: 1) To estimate the blood glucose level in students; 2) To know the fear of rides in students; 3) To know the blood sugar fluctuations in students; 4)

Ride-induced fear in students; 5) Glucose levels and emotional affiliations; 6) Expression of the hormonal response to fear.

## 2. Materials and Methods

### 2.1. Study Design

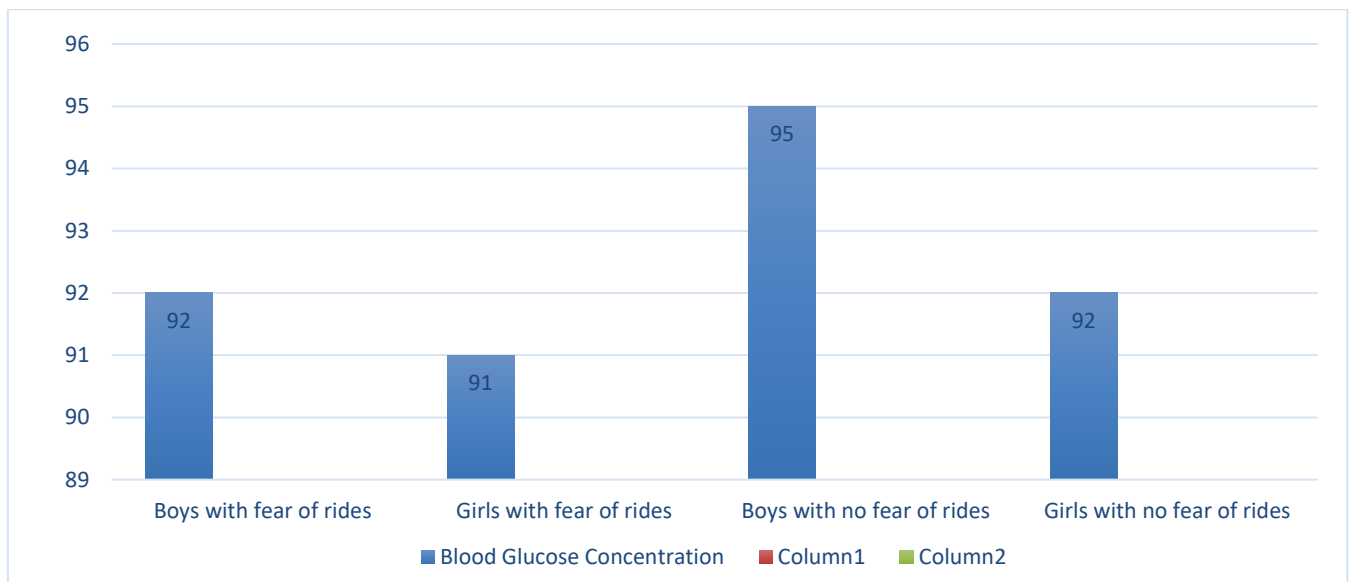
The blood sugar concentrations of 130 subjects were measured by us. We used Digital glucometer device for this purpose. For the purpose of designing project, a questionnaire having questions related to phobia of rides and blood sugar concentration was prepared. Among the students, questionnaire was distributed and the results were analyzed later.

### 2.2. Statistical Analysis

Analysis of the data was done statistically by using the software Mstat. The results were analyzed later by us. The *p* value shows that these results were not significant.

## 3. Results and Discussion

About 130 subjects took part in this study. About 79 girls and 51 boys took part. The study clearly has shown that girls are more afraid of such kind of rides. Those boys whose blood sugar level is 92 are more afraid of rides than those with blood sugar level 95. Similarly, those girls whose blood glucose level is 91 are more afraid of rides as compared to those having sugar level 92.



Researchers are working more and more to know the relations between different parameters to co-relate them and resulting in decision making [7]-[10]. From this study it has been made clear that people with high level of blood glucose are not usually afraid of rides while those having low blood sugar concentration are more afraid of rides.

## 4. Conclusion

It is concluded from this study that those disciples whose blood sugar level is high have basically more fear of rides while those having lower level are less afraid.

## 5. Future Recommendations

In future, there may be a comprehensive and fully equipped advanced type of research that may influence the persons especially students to maintain their blood glucose level before going to ride.

### Declarations

#### Source of Funding

This study did not receive any grant from funding agencies in the public, commercial, or not-for-profit sectors.

#### Competing Interests Statement

The authors declare no competing financial, professional, or personal interests.

#### Consent for publication

The authors declare that they consented to the publication of this study.

### References

- [1] Egi, M., Bellomo, R., Stachowski, E., French, C.J., & Hart, G. (2006). Variability of blood glucose concentration and short-term mortality in critically ill patients. *The Journal of the American Society of Anesthesiologists*, 105(2): 244–252.
- [2] Reinhart, R., Letterio, F., Pugliese, P., Ritter, C., Lubrano, G., Guilbault, J., & Feistel, C. (1988). U.S. Patent No. 4,750,496. Washington, DC: U.S. Patent and Trademark Office.
- [3] Qadir, M.I., & Ishfaq, S. (2018). Awareness about hypertension in biology students. *Int J Mod Pharma Res.*, 7(2): 084–10.
- [4] Qadir, M.I., & Mehwish (2018). Awareness about psoriasis disease. *Int J Mod Pharma Res.*, 7(2): 17–18.
- [5] Mone, L.C. (1970). Short-term group psychotherapy with postcardiac patients. *International Journal of Group Psychotherapy*, 20(1): 99–108.
- [6] Borkovec, T.D. (1973). The effects of instructional suggestion and physiological cues on analogue fear. *Behavior Therapy*, 4(2): 185–192.
- [7] Qadir, M.I., & Shahzad, R. (2018). Awareness about obesity in postgraduate students of biotechnology. *Int J Mod Pharma Res.*, 7(2): 14–16.
- [8] Qadir, M.I., & Rizvi, M. (2018). Awareness about thalassemia in post graduate students. *MOJ Lymphology & Phlebology*, 2(1): 14–16.
- [9] Qadir, M.I., & Ghalia, B.A. (2018). Awareness survey about colorectal cancer in students of M. Phil Biotechnology at Bahauddin Zakariya University, Multan, Pakistan. *Nov Appro in Can Study*, 1(3).
- [10] Qadir, M.I., & Saba, G. (2018). Awareness about intestinal cancer in university student. *Nov Appro in Can Study*, 1(3).