

## Extended Abstract

### BurnBLITZ Version II: A Personalised Fitness App Revolutionising Exercise and Combating Obesity Among University Students

Noor Azila Azreen Md Radzi<sup>1\*</sup>, Muhamad Noor Mohamed<sup>1</sup>, Raja Nurul Jannat Raja Hussain<sup>1</sup>, Muhamad Safiq Saiful Annur<sup>1</sup>, Mohd Aizzat Adnan<sup>1</sup>, Maisarah Shari<sup>2</sup>.

<sup>1</sup>Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Negeri Sembilan Branch, Seremban Campus, 70300, Malaysia.

<sup>2</sup>Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Shah Alam Campus, 40450 Selangor, Malaysia.

#### ABSTRACT

With Malaysia facing one of the highest obesity rates in Southeast Asia (20.1% of adults are classified as obese), fitness apps have gained popularity as tools to promote healthier lifestyles. BurnBLITZ Version II (V2), a personalised exercise app, was developed to address obesity among university students by offering tailored workout plans, instructional videos, and cloud-based updates for safe and effective training. A trial involving 150 students selected based on body mass index (BMI) and willingness to volunteer was conducted. Participants were divided into two groups: one using the apps ( $n=75$ ) and a control group ( $n=75$ ). Pre- and post-tests assessing cardiovascular fitness, muscular strength, and endurance significantly improved in the app-assisted group ( $p<0.05$ ). Unlike typical fitness apps, BurnBLITZ V2 provides expert consultations, offering personalised guidance to enhance user engagement and motivation. This feature makes it particularly beneficial for university students with busy schedules, helping them integrate exercise into daily routines. By addressing common fitness barriers like time management and commitment, BurnBLITZ V2 presents a promising solution for combating obesity through accessible, engaging, and personalised fitness support.

**Keywords:** Burnblitz app, correct exercise, health and fitness, exercise guidance, fitness app.

#### \*Corresponding author

Noor Azila Azreen Md Radzi

Faculty of Sports Science and Recreation, Universiti Teknologi MARA Negeri Sembilan Branch, Seremban Campus, 70300, Malaysia.

Email: [azila\\_azreen7172@uitm.edu.my](mailto:azila_azreen7172@uitm.edu.my)

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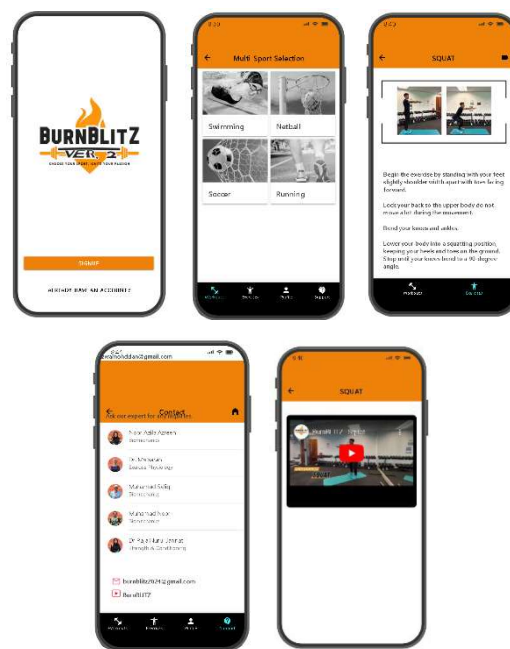


## 1.0 Introduction

The demanding and stressful lifestyle of university students, characterised by long study hours, irregular schedules, and limited opportunities for physical activity, often results in unhealthy eating habits and sedentary behaviour, ultimately increasing their risk of obesity (1,2). As technology advances and digital transformation grows (3), Pradal-Cano *et al.* (2020) (4) has suggested that mobile apps can potentially improve health outcomes and may be recognised as cost-effective, scalable interventions. Considering rising obesity rates, integrating new technologies is both timely and crucial for revolutionising healthcare and promoting healthier living (5). Supporting this, Al-Nawaiseh *et al.* (2022) (6) have demonstrated that mobile apps are particularly effective in driving behaviour change, especially in addressing lifestyle risk factors such as physical activity. BurnBLITZ Version V2 (Figure 1), a personalised fitness app built on the Adalo platform, provides a user-friendly tool for students to combat obesity by promoting regular exercise and reducing obesity-related health issues

## 2.0 Innovation

BurnBLITZ V2 offers a progressive fitness experience, starting with basic exercises and gradually incorporating weight training and recovery phases. The app features personalised workout plans, interactive content, expert guidance, and community support (Figure 1). The "Choose Your Sport" option allows users to customise their workouts based on their preferences. Cloud-based updates ensure the app remains aligned with the latest exercise science, making it an effective tool for promoting healthy living and long-term fitness success.



**Figure 1:** User interface of BurnBlitz Version II.

## 3.0 Uniqueness

Unlike most fitness apps, BurnBLITZ V2 offers expert consultations and comprehensive guidance to motivate users and ensure proper exercise form. Combining written instructions, pictures, and videos, this multi-format approach ensures effective exercise execution, like following a medical regimen (3, 4).

## 4.0 Commercialisation Potential

BurnBLITZ V2's commercial potential is driven by increasing demand for fitness solutions and its adaptability, affordability, and alignment with current trends. During the development process, the developer had already secured partnerships with several companies to enhance the features further and market the apps. Besides that, the future update also includes gamification elements, further enhancing its value to be sold as a premier app to aid fitness and boost a healthy lifestyle. Other than that, developers are also in the process of tying some knots with

fitness celebrities to be the experts in the apps. The best part of this app is that it will also be in multiple formats and can be used by all handheld devices out there.

### 5.0 Impact on Quintuple Helix

BurnBLITZ V2 can impact various sectors, including society, academia, government, the fitness industry, and the environment. By promoting healthier lifestyles, reducing obesity, and supporting public health initiatives, the app offers a valuable solution to address these critical issues.

### 6.0 Conclusion

BurnBLITZ V2 offers a comprehensive solution to promote healthier lifestyles and address the growing obesity crisis. By aligning with public health goals, supporting academic research, and fostering innovation in the fitness industry, the app can significantly impact various sectors.

### Authorship contribution statement

**NAMR** and **MNM**: The technical development, ensuring the app's functionality and user-friendliness; **RNJRH** and **MAA**: Content and design, crafting engaging exercises and a visually appealing interface; **MSSA** and **MS**: Wrote the academic paper, providing a theoretical framework and empirical evidence to support the app's effectiveness. Their expertise and dedication contributed significantly to the app's success and the quality of the academic work.

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### Conflict of Interest

The authors declared that they have no conflicts of interest to disclose.

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