

Factors Affecting University Students' Eating Behaviours:

A Mixed-Methods Investigation

Research Question: What social, psychological, and environmental factors influence eating behaviours among university students?

Introduction

Eating behaviour among university students has become an increasing area of interest within public health and behavioural research (Almoraie,2025). The transition to university life represents a critical developmental period in which young adults experience substantial lifestyle changes, including increased independence, altered routines, and exposure to new social environments. These changes can significantly influence dietary habits, often resulting in irregular meal patterns, increased consumption of fast food, and reduced intake of nutrient-dense foods (Almoraie,2025). Understanding the factors that affect students' eating behaviours is therefore essential, given the potential long-term consequences for physical health, mental wellbeing, and academic performance.

For many students, university is the first context in which they are responsible for food purchasing, preparation, and meal planning. While this independence can support positive dietary development, it can also increase vulnerability to unhealthy eating patterns when combined with academic pressures and limited resources. Research (Poobalan, 2014) suggests that habits formed during this period often persist into later adulthood, increasing the importance of early intervention and health promotion within student populations.

Previous research consistently indicates that university students are at heightened risk of poor dietary behaviours compared to other population groups. Studies have reported low fruit and vegetable consumption, high intake of sugar-sweetened beverages, and frequent skipping of meals, particularly breakfast. Such behaviours are associated with increased risk of obesity, cardiovascular disease, and metabolic disorders later in life. Additionally, diet quality has been linked to cognitive functioning and academic outcomes, suggesting that unhealthy eating patterns may negatively impact students' concentration, memory, and overall academic success. (Jurado-Gonzalez, 2025)

A range of factors have been identified as influencing students' eating behaviours, with time pressure consistently highlighted as a key determinant. University students frequently juggle multiple responsibilities, including lectures, coursework deadlines, employment, and social commitments. As a result, limited time for food preparation often leads to reliance on convenience foods that are typically high in fat, salt, and sugar. Time constraints may also contribute to irregular eating schedules, such as

skipping meals or eating late at night, which can disrupt appetite regulation and energy balance (Steger, 2023)

Closely related to time pressure is financial limitation. Many students experience financial strain due to tuition fees, accommodation costs, and limited income. Research (Jurado-Gonzalez, 2025) suggests that perceived cost is a significant barrier to healthy eating, with students often viewing nutritious foods such as fresh produce as less affordable than processed alternatives. Financial stress may therefore reinforce unhealthy eating patterns and increase reliance on cheaper, energy-dense foods, particularly among students from lower socioeconomic backgrounds.

Social influences also play a crucial role in shaping eating behaviours during university years (Anderson Steeves, 2016). Peer norms, social eating practices, and shared living arrangements can all affect food choices. For example, students living with peers may adopt group eating habits, which can include late-night snacking or frequent consumption of takeaway food. Social media exposure further amplifies these influences by promoting idealised body images, diet trends, and food marketing, which may impact both eating behaviour and body satisfaction (Dane, 2023)

Psychological factors, including stress, mood, and emotional wellbeing, have been strongly associated with eating patterns among students (Caso, 2020). Academic stress, examination pressure, and adjustment difficulties may contribute to emotional eating or appetite suppression. Stress-related eating has been linked to increased consumption of high-calorie comfort foods, while anxiety and low mood may reduce motivation to prepare balanced meals. These psychological factors often interact with environmental and social influences, creating complex patterns of behaviour. (Choi,2020)

The food environment is another critical determinant of students' dietary choices. Accessibility and availability of food on and around university campuses, including the density of fast-food outlets and vending machines, can strongly influence consumption patterns (Li,2022). Students living in halls of residence may face limited cooking facilities or space, further restricting their ability to prepare healthy meals. Whilst on the other hand, students with access to kitchen facilities and food preparation skills may be better positioned to maintain healthier diets.

Despite extensive research on student nutrition, gaps remain in understanding how these factors interact within specific student populations. Many studies rely on quantitative methods alone (Stuber,2023), which may overlook the subjective experiences and motivations underlying food choices. Therefore, a mixed-methods approach may provide a more comprehensive understanding of the factors influencing students' eating behaviours by combining measurable trends with in-depth personal perspectives. This study aims to address these gaps by examining the social, psychological, and environmental factors affecting eating behaviours among university students. By identifying key

influences and their relative importance, the research may inform the development of targeted interventions and university-based health promotion strategies aimed at improving student nutrition and wellbeing.

Aims, Objectives, and Hypotheses

The primary aim of this study is to investigate the social, psychological, and environmental factors that influence eating behaviours among university students. Specifically, the study seeks to identify common dietary patterns, examine the relationship between perceived stress and eating behaviour, and explore how time, financial constraints, and social influences shape food choices. It is hypothesised that higher levels of perceived stress will be associated with poorer dietary quality, and that greater time and financial constraints will be negatively associated with healthy eating behaviours (Khaled,2021). These findings aim to inform evidence based interventions designed to improve dietary behaviours, well being outcomes, and long-term health among students.

Method

Research Design

This study will be a mixed-methods research design to examine the factors influencing eating behaviours among university students. A mixed-methods approach is considered appropriate as eating behaviour can be complex and influenced by psychological, social, and environmental factors that cannot be fully understood using a single methodological approach (Dicu, 2024). Quantitative methods allow for the identification of general patterns and relationships between variables, while qualitative methods provide deeper insight into students' lived experiences and perceptions (Bazen 2021). The integration of both approaches enhances the depth, validity, and interpretability of the findings.

Participants

Participants will be undergraduate university students aged 18–25 years. This age group is selected as it represents a key transitional period when individuals establish independent eating habits. A sample size of approximately 100 participants will be recruited for the quantitative component, with a sub-sample of 5–10 students participating in qualitative interviews. Participants will be recruited using convenience sampling via university email lists, social media platforms, and campus noticeboards.

Inclusion and Exclusion Criteria

Inclusion criteria will require participants to be currently enrolled as full-time undergraduate students and able to provide informed consent. Participants must be within the specified age range to ensure developmental consistency across the sample. Students with a self-reported diagnosis of an eating disorder will be excluded from the study in order to minimise potential psychological distress and to maintain the focus on non-clinical eating behaviours. This exclusion criterion is also intended to ensure ethical sensitivity given the nature of the research topic.

Convenience sampling will be used and is justified due to practical constraints such as time and accessibility; however, efforts will be made to recruit a diverse sample in terms of gender, living arrangements, and academic discipline. While convenience sampling may limit generalisability, it is commonly used in student research and remains appropriate for exploratory investigations of behavioural factors,

Quantitative data Collection

Quantitative data will be gathered using an online self-administered questionnaire. This method enables flexible participation and supports efficient and accurate data handling. The questionnaire will collect demographic information, including participants' age, gender, year of study, living arrangements, and employment status. Dietary intake will be measured using a validated food frequency questionnaire to provide an indication of participants' dietary patterns and overall diet quality. Levels of psychological stress will be assessed using a standardised perceived stress measure that has been shown to be reliable and valid in student samples. Further questions will examine perceived time pressure, financial constraints, and access to food and cooking facilities.

To enhance the reliability of the quantitative data, validated and widely used measurement tools will be employed wherever possible. The use of standardised scales increases the comparability of findings with existing literature and strengthens the methodological rigour of the study. Participants will be informed that there are no right or wrong answers and will be encouraged to respond honestly to reduce the risk of social desirability bias. Despite these measures, self-report data may still be subject to recall bias and subjective interpretation, which will be acknowledged as a limitation of the study.

Qualitative Data Collection

Qualitative data will be collected through semi-structured interviews conducted in person or online. Semi-structured interviews are particularly suitable for this study as they provide a flexible framework that allows participants to elaborate on their experiences while ensuring that key topics are

consistently explored. Interview questions will focus on students' perceptions of healthy eating, barriers and facilitators to making healthy food choices, the influence of social relationships and living arrangements, and the impact of stress and emotions on eating behaviour.

Ethical Considerations

Ethical approval will be obtained from the relevant university ethics committee prior to data collection. Participants will be provided with an information sheet outlining the purpose of the study, what participation involves, and their rights as participants. Written informed consent will be obtained before participation. Confidentiality will be ensured to the students whilst securely storing all data in accordance with data protection regulations. Participants will be informed of their right to withdraw from the study at any time without any attachment or possible set backs. Given the potentially sensitive nature of discussions around eating behaviour, participants will also be provided with information about support services should they experience any discomfort.

Interviews are expected to last approximately 30 to 45 minutes and will be audio-recorded with participants' consent. Audio recordings will be transcribed to ensure accuracy of the data. To enhance the credibility of the qualitative findings, an interview guide will be used, and reflective notes will be taken following each interview to capture initial impressions and emerging themes. This process supports reflexivity and helps minimise researcher bias during analysis.

Data Analysis

Quantitative data collected through the online questionnaire will be analysed using statistical software such as SPSS. Descriptive statistics will first be used to summarise participant characteristics and key variables, including dietary patterns, perceived stress levels, time pressure, and financial constraints. This initial analysis is appropriate for providing an overview of students' eating behaviours and identifying common trends within the sample.

Inferential statistical analyses (Allua,2009) will then be conducted to address the research question by examining relationships between eating behaviours and potential influencing factors. Pearson's correlation analysis will be used to explore associations between continuous variables such as perceived stress and diet quality. Multiple regression analysis will be used to determine the extent to which psychological, social, and environmental factors predict eating behaviours while controlling for relevant demographic variables. This approach is appropriate as it allows for the assessment of the relative contribution of multiple factors simultaneously, which aligns with the multifactorial nature of eating behaviour.

Qualitative interview data will be analysed using thematic analysis. Interview transcripts will be coded systematically to identify recurring patterns and themes related to students' experiences of food choice, perceived barriers to healthy eating, and the influence of stress

and social environments. Thematic analysis is the most appropriate method for this study as it enables in-depth exploration of participants' perspectives and provides rich contextual understanding that cannot be captured through quantitative measures alone.

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