

### **Bachelor and Master projects 2021/ 2022**

Bachelor or Master thesis projects are usually **empirical** (quantitative and/ or qualitative). They thus require students to be involved in study planning and data collection as well as to analyse the collected data semi-autonomously. Although previous experience in conducting behavioural studies is desirable, it is not a prerequisite. However, students should be willing to acquire the necessary skills. They will be supported in the necessary steps by the supervisor and the group. The thesis can be **written in English or German**.

Please note that the thesis will also involve preparatory work (e.g., pre-registration of the study plan, obtaining ethical approval). It is thus advised to get in touch at least **eight months before the projected submission date** to ensure that the project can be completed in time.

If you are interested in one of the following topics, please fill in the application form and email it to [Jun.-Prof. Dr. Laura M. König](#).

**Applications close on 21 July 2021.** A decision will be made after an interview. The interview will take place within 2 weeks after the application deadline.

If you have no experience in analysing quantitative data, it is recommended that you attend the Data Analysis and Statistics module (lecture and seminar) of the M.Sc. Food Quality and Safety programme, which is offered in the winter semester. Further information on the course will be available soon.

#### **Topic A: The impact of Ramadan fasting on eating behaviour**

Description: Ramadan is a month of fasting, prayer, reflection and community observed by Muslims worldwide. During Ramadan, Muslims refrain from eating and drinking from dusk until dawn. The fast is usually broken after sunset with a shared meal called *iftar*. Ramadan thus constitutes a deliberate major disruption in people's daily routines, including but not limited to eating behaviour, that is supposed to have far-reaching consequences for people's emotional well-being. This project aims to investigate changes in eating behaviour regarding food intake and eating-related well-being during Ramadan compared to non-fasting before and after Ramadan using smartphone-based Ecological Momentary Assessment. Furthermore, eating behaviour of participants who fast will be compared to the eating behaviour of participants from similar and dissimilar cultural backgrounds who do not fast during Ramadan. In addition, changes in the meaning of Ramadan-related food rules and the social significance of common meals during Ramadan (*Jamma'a*) in dietary acculturation processes will be explored in qualitative interviews. Three theses will contribute to this project. Two will focus on the quantitative assessment of changes in food intake (topic A1) and eating-related well-being (topic A2). One will focus on changes in the social construction and meaning of Ramadan in acculturation processes by analysing the interview data (topic A3). The latter topic will be supervised by Jun.-Prof. Tina Bartelmeß, Junior Professor of Food Sociology.

Methods: Smartphone-based Ecological Momentary Assessment across several time points in the first half of 2022 and descriptive analysis of the data (topics A1 and A2); qualitative interviews (topic A3)

We are looking for: 3 students to assist with study planning, developing materials, data collection, and data analysis.

Project start date: flexible; between October 2021 and January 2022

Language: The study will be conducted in English; study team meetings will be held in English; knowledge of Arabic, Turkish or other languages that are spoken in countries with a predominantly Muslim population are a bonus, but not required.

Additional information: This is a long-term group project supervised by Jun.-Prof. König/ Anila Allmeta (topics A1 and A2) and Jun.-Prof. Bartelmeß (topic A3) and spans assessments in the first half of 2022. The project is suitable for students who want to submit their thesis in summer/ autumn 2022 or later.

Suggested readings:

Ahmad, S., Goel, K., Maroof, K. A., Goel, P., Arif, M., Amir, M., & Abid, M. (2012). Psychosocial behaviour and health benefits of Islamic fasting during the month of Ramadan. *Journal of Community Medicine and Health Education*, 2(9), 1-4.

Alghafli, Z., Hatch, T. G., Rose, A. H., Abo-Zena, M. M., Marks, L. D., & Dollahite, D. C. (2019). A qualitative study of ramadan: a month of fasting, family, and faith. *Religions*, 10(2), 123.

Hellmann, J. (2008). The significance of Eating During Ramadan: Consumption and Exchange of Food in a Village in West Java. *Food and Foodways*, 16(3), 201-226.

Hoddy, K. K., Marlatt, K. L., Çetinkaya, H., & Ravussin, E. (2020). Intermittent Fasting and Metabolic Health: From Religious Fast to Time-Restricted Feeding. *Obesity*, 28, S29-S37.

### **Topic B: Why do people use nutrition apps and fitness trackers, and are these motivations related to disengagement?**

Description: Smartphone apps and wearables to track and change lifestyle behaviours such as eating behaviour and physical activity are becoming increasingly popular. Previous research has highlighted that these so-called mHealth technologies are used to reach a multitude of goals; weight loss or maintenance only being two of many. In addition, previous research has shown that most users of mHealth disengage from using the app before they reach their goal; accordingly, mHealth technologies are not yet reaching their full potential for health promotion in the population. This project aims to explore if people who try to reach certain goals by using a nutrition app or fitness tracker are more likely to disengage from usage. In a first step, available qualitative data from an online survey will be analysed to identify goals that people aimed to reach using nutrition apps and fitness trackers. Based on the results, a quantitative survey will be designed to investigate if certain goals are associated with increased likelihood of disengagement.

Methods: analysis of available qualitative data, quantitative online study

We are looking for: 1 student to analyse available qualitative data, design a questionnaire and collect and analyse data from a subsequent quantitative online study

Projected start date: flexible

Language: The qualitative data is provided in German. The quantitative survey can be conducted in English or German.

Suggested readings:

Attig, C., & Franke, T. (2020). Abandonment of personal quantification: A review and empirical study investigating reasons for wearable activity tracking attrition. *Computers in Human Behavior*, 102, 223-237.

König, L. M., Attig, C., Franke, T., & Renner, B. (2021). Barriers to and Facilitators for Using Nutrition Apps: Systematic Review and Conceptual Framework. *JMIR mHealth and uHealth*, 9(6), e20037.

### **Topic C: Perceived ease of changing aspects of eating behaviour and physical activity**

Description: Most people recognise the importance of lifestyle behaviours such as eating and physical activity for their health. Still, most people do not sufficiently engage in healthy lifestyle behaviours, which has detrimental consequences for their health and well-being. In this project, we aim to better understand the difficulties related to behaviour change. We will conduct an online study to investigate people's perception of the effort required to change different aspects of eating behaviour (e.g., eating more fruits and vegetables, eating fewer sweets) and physical activity (e.g., reaching 10.000 steps per day, engaging in moderate to vigorous physical activity for 30 minutes per day) to better support behaviour change attempts in the future.

Methods: quantitative online study

We are looking for: 1 student to assist with study planning, data collection, and data analysis

Projected start date: flexible

Language: English or German, depending on personal preference of the candidate.

Suggested readings:

Cheval, B., & Boisgontier, M. P. (2021). The Theory of Effort Minimization in Physical Activity. *Exercise and Sport Sciences Reviews*, 49(3), 168.

Nudelman, G., & Shiloh, S. (2016). Understanding behavioural clusters: Identifying differences between clusters of health behaviours on key constructs. *Psychology & Health*, 31(12), 1375-1390.

### **Contact:**

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