

INTRODUCTION

- Malnutrition continues to pose a challenge, stemming from the dietary choices made by individuals and the factors influencing those choices (Turner *et al.*, 2020).
- The food consumption patterns are shifting in Tanzania due to alterations in the food environment (Ambikapath *et al.*, 2021; Blake *et al.*, 2023).
- The food environment is composed of external and personal domains, where the personal domain includes aspects such as consumer's culture and psychology, which influence their eating behaviour.
- The influence of social and psychological aspects of the food environment such as perception and attitude toward food choices is less researched in Tanzania (Downs *et al.*, 2020).
- Most studies (Bonczyk *et al.*, 2022; Ambikapath *et al.*, 2021; Blake *et al.*, 2023) have focused on the physiological aspects of food environment rather than the socio-psychological.
- Understanding the socio-psychology aspects is crucial, as they have a tendency to shape consumer behavior (McDermot *et al.*, 2015). Enhancing understanding of these aspects could promote healthy food choices, and consequently address all forms of malnutrition..

OBJECTIVES

- To explore the influence of socio-psychological aspects of the personal food environment on food choices, by applying the theory of planned behaviour (TPB) and health belief model (HBM).
- Within the TPB framework, the study assessed the predictive role of knowledge, attitude, and perceived behaviour control on food choices.
- Within the HBM framework, the study examined the perceived susceptibility, barriers, cues of action, severity, and health behavioural identity as potential predictors of food choice.

METHODOLOGY

- A cross-sectional survey was conducted in Mkuranga and Ilala districts of Tanzania in March, 2023 (Fig 1).
- A multi-stage sampling with stratification was employed to select 408 households in the study areas and data was collected using a questionnaire.
- The Theory of Planned Behaviour (Ajzen, 1985) and the Health Belief Model (Vassallo *et al.*, 2009) were used as conceptual frameworks.
- Data analysis employed the Structural Equation Model (SEM) (Fan *et al.*, 2016) to test the influence of TPB and HBM constructs on food choices.

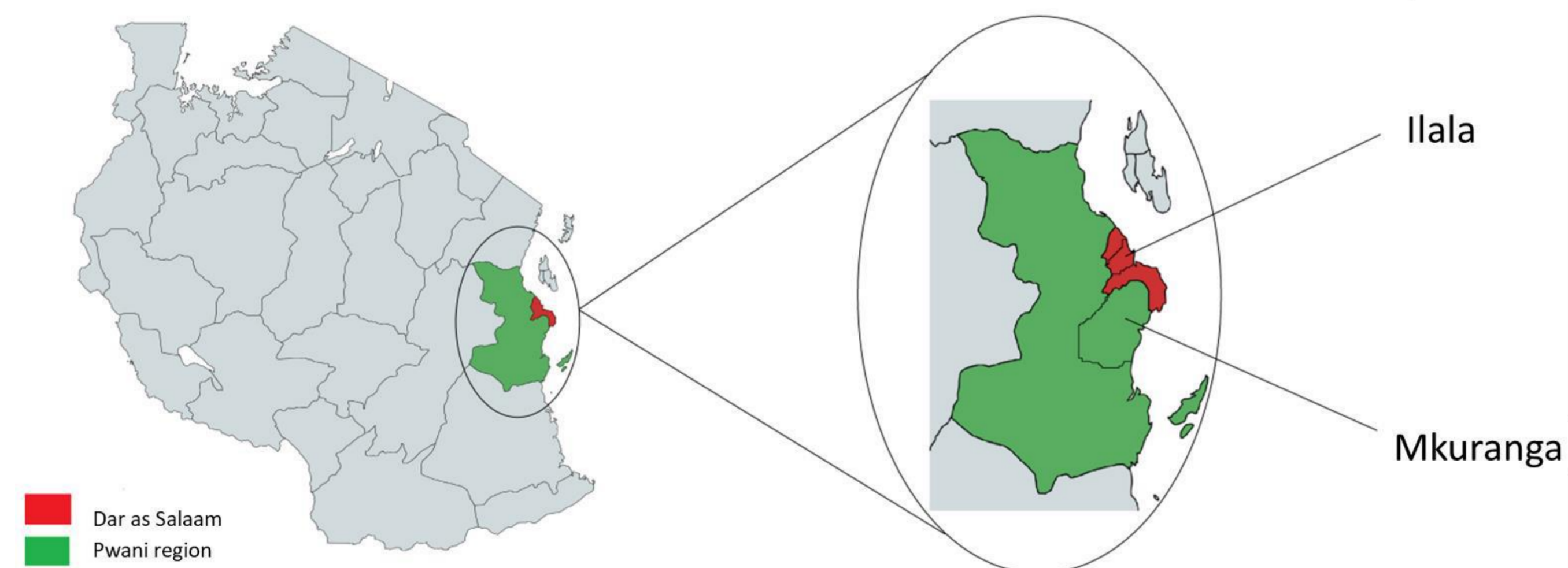


Figure 1: The study areas

RESULTS

Health Belief Model (HBM)

- Consumers' subjective assessment of the risk of developing a health problem by not choosing healthy foods (*Perceived Susceptibility*) influences ($\beta=0.25$) them to identify themselves as sensitive to food-related health problems (*Health Behavioural Identity*).
- The subjective assessment of the severity of a food-related health problem (*Perceived Severity*) influences positively ($\beta=0.28$) the health behavioural identity toward choices of healthy eating.
- Consumers' assessment of the difficulties in acquiring healthy foods (*Perceived Barriers*) hinders ($\beta=-0.38$) the healthy behavioural identity toward the choice of healthy eating.

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- Cues to action such as advice from the doctor, significantly influence positively ($\beta=0.16$) the health behaviour identity towards the choice of healthy eating.
- Overall, the health behavioural identity significantly predicts ($\beta=1.02$) the intention to choose healthy foods (Table 1).

Table 1: Results of the structural model for HBM

Constructs Relationship	Path Coef. (β)	SE
Perceived Susceptibility => Health Behavioural Identity	0.255***	0.046
Perceived Severity => Health Behavioural Identity	0.282***	0.047
Perceived Barriers => Health Behavioural Identity	-0.381***	-0.045
Cues to action => Health Behavioural Identity	0.158***	0.037
Health Behavioural Identity => Intention	1.024***	0.046

Chi-Square = 2235.027 ***
 Aikake's information criterion (AIC) = 25524.591
 Comparative fit index (CFI) = 0.800
 Coefficient of Determination (CD) = 1.00
 Root mean squared error of approximation (RMSEA) = 0.165

R Square = 0.999
 Bayesian information criterion (BIC) = 25797.357
 Tucker-Lewis index (TLI) = 0.772
 Standard root mean squared residual (SRMSR) = 0.519

Note: ***, **, and * implies significance at $p<0.01$, $p<0.05$ and $p<0.1$, respectively

Theory of Planned Behaviour (TPB)

- The consumer's perception of the easiness of consuming healthy foods (*Perceived Behavioural Control*) predicts ($\beta=0.45$) the intention to choose healthy eating behaviour.
- The consumers general evaluation of the goodness of consuming healthy foods (*Attitude*) significantly predicts ($\beta=0.53$) the intention to choose healthy foods.
- Knowledge about healthy eating (*Knowledge*) significantly predicts ($\beta=0.36$) the intention to choose healthy foods.
- Perceived behavioural control is the strongest predictor ($\beta=0.45$) of intention to consume healthy foods.
- Knowledge shows a significant prediction of attitude and perceived behavioural control; and attitude influences perceived behavioural control (Table 2).

Table 2: Results of the structural model for TPB

Constructs Relationships	Path Coef. (β)	SE
Knowledge => Attitude	0.94214***	0.04883
Attitude => Perceived Behavioural Control	0.53324***	0.08892
Knowledge => Perceived Behavioural Control	0.49793***	0.09340
Attitude => Intention	0.25903***	0.07475
Perceived behavioural control=> Intention	0.45302***	0.05299
Knowledge => Intention	0.36853***	0.07725

Chi-Square = 539.916***
 Aikake's information criterion (AIC) = 19567.471
 Comparative fit index (CFI) = 0.949
 Coefficient of Determination (CD) = 0.952
 Root mean squared error of approximation (RMSEA) = 0.096

R Square = 0.9496
 Bayesian information criterion (BIC) = 19796.113
 Tucker-Lewis index (TLI) = 0.938
 Standard root mean squared residual (SRMSR) = 0.027

Note: ***, **, and * implies significance at $p<0.01$, $p<0.05$ and $p<0.1$, respectively

CONCLUSION

- Over 90% of intention to choose healthy foods is predicted by socio-psychological aspects including knowledge, attitude, perceived behaviour control, and consumer's health behavioural identity.
- It is imperative that food, health and nutrition interventions integrate such aspects in order to improve consumers' knowledge, and foster positive attitudes and perceptions about healthy eating.
- The findings suggest that food and agriculture policies should compose programs that improve the personal food environment, such as nutritional education and food choice literacy. This could help to change consumers' behaviour towards healthy eating.

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