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Spotlight on MSc Research

"They called me instant king." A narrative analysis of the experiences of first year university international students' fruit and vegetable consumption.

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Introduction

Aston University, UK & Makerere University, Kampala Rachel L. Shaw Aston University, UK Fruit and vegetable (F&V) consumption is on the decline among United Kingdom (UK) university students despite national campaigns to encourage consumption of the recommended daily

intake(Robinson, Blissett, & Higgs, 2011). The World Health Organization (WHO) proposes an intake of 400 grams of F&V per day as a valuable part of a healthy diet(World Health Organisation, 2003). This forms the basis of the UK 5-a-day programme (five 80 gram portions or two fruits and three vegetables) (Department of Health, 2003; Henderson, Gregory, & Swan, 2002). This study focused on a small yet significant sector of the population – international students in UK universities. This category has been under studied because of the need for vast cross-cultural awareness and little guidance on how to design and conduct studies with this increasingly diverse (cultures, beliefs, backgrounds) population (Hughes, 2004; Nelson, Story, Larson, Neumark-Sztainer, & Lytle, 2008). We know that changing the eating behaviour of ethnically diverse university students is challenging and often unsuccessful (Rodgers et al., 2016).

As students transition to university, they experience a number of changes and differences to their eating patterns, which can create barriers to healthy eating. Typically, a university lifestyle is characterised by risky behaviour (binge-drinking, smoking), irregular eating and sleep patterns, poor diet, and work pressures; it is no surprise that students' F&V consumption is affected (Dodd, Al-Nakeeb, Nevill, & Forshaw, 2010; Papadaki & Scott, 2002). The shift from home to university or native country to the UK may have an impact.

Methods

We used a qualitative design where we asked for students' stories of their experiences and beliefs about F&V consumption. First-year undergraduate international students who were on-campus residents were recruited. Data are reported from eight participants (Table 1). The diverse sample is characteristic of the UK international student population(UKCISA., 2012).

We conducted semi-structured interviews using an interview guide (Table 2) with students completing their first year and could recount their experiences since moving to the UK. The interviews were transcribed verbatim and the stories were analysed for style and content using narrative analysis. This enabled in-depth exploration of students' experiences and their experience of acculturation in relation to F&V consumption (Berry & Sam, 2007; Murray, 2008).

Table 1	
Participant j	pen por traits
Pseudonym	
Benny	21-year-old Rwandese studying Multimedia computing and has lived most of his
	childhood with his parents in Belgium. Believes having grown up in Europe, he is already
	used to the lifestyle in UK and the fast-food culture. Acknowledges that majority of
	university students eat less F&V and there is room for improvement. He speaks of how the
	media advertises fast food and not F&V and believes it is likely to get worse for future
	generations. His turning point was coming to university and getting a lot of independence
35-14	and freedom.
Matthew	22-year-old Korean studying Engineering. The first difference he recognises is the cooking
	style in UK. For his first term, he bought a lot of instant food (noodles), and then he went
	on to eat from the cafeteria and finally bought a rice cooker in his second term. Strongly
	misses home food and tries to look out for or cook some. His turning point was his friends
	calling him "instant king" and buying a rice-cooker. He acknowledges that other students
	eat more F&V than him and plans to change in second year; move into accommodation
Mart	with other Korean students.
Mark	20-year-old Estonian studying Pharmacy. He has two jobs, at a hospital and as a waiter.
	His experience was quite easy as he had a friend in England prior to his arrival that helped
	him but confesses becoming home-sick. He was running out of money and to save some
	he spent one pound a day on food and cut out all F&V and certain meals. He was
	cautioned by his flatmate concerning his eating behaviours who advised him that, "money
	is not the most important, it's health." His turning point was getting a job, started to buy
	more F&V however, he got busier and started having fast-food but he feels he is eating
Dental	more F&V than recommended.
Daniel	21-year-old Chinese studying Logistics management. He found significant differences in
	time and eating patterns. Has no interest in cooking like his girlfriend so finds it
	convenient to eat out. He prefers home food and walks to Chinatown to eat and shop.

(continued)

Initially he never thought about what he ate and was more concerned of the taste and killing the hunger. Justifies his previous behaviour in general terms by frequently using "we Chinese students." His turning point was when he discovered he has a liver problem and now controls his eating and tries to have a healthy lifestyle. 20-year-old Hungarian living in Austria studying International relations and French. Brought

Laura 20-year-old Hungarian living in Austria studying International relations and French. Brought up under strict family environment where you ate all that was on your plate. She had health problems in childhood, was forced to eat F&V, and later began to like them. Experienced a massive change in diet and shocked by prices of food on coming to UK. Partied a lot and ended up eating less healthily but hopes to get a job, spend more on F&V, and work towards healthy lifestyle with her friend. Now eating lots of F&V and healthily to lose weight and

shape up for the summer.

Mary22 year old Lithuanian studying combined honours - Biology and psychology. It is her first
time away from home, living by herself, so she found it all new and challenging for her.
She is very selective in her eating, likes F&V and eats healthily. She always ensures she
eats right and is against unhealthy eating. Grew up at a farmhouse from childhood so was
surrounded by F&V and nature and always ate produce from the garden. She worked on a
farm and has the perception that most market foods have pesticides and chemicals. Her
turning point was finding a new lifestyle from a friend linked to Vedas and has changed
what she eats, time and amount she eats and eats more F&V and avoids meat as a result.Elizabeth19-year-old Romanian studying Business and Psychology. She loves travelling however

found it a big shock and overwhelming but later became used to life in the UK and it got better. Does not think her diet changed and her biggest challenge was cooking for herself. Initially ate a lot in pubs, tried all sorts of British meals, did not have a proper eating pattern, missed meals and ate whatever she felt. Eventually learnt how to cook from her mother. She believes she is now eating healthily and living with her parents for 18 years has had a big influence. Strongly believes eating F&V is down to personal choice, holding onto past behaviours and not where you are.

(continued)

Esther 20-year-old Mongolian studying Economics and Management. It is her first time living independently for more than a month. Her biggest differences were the cooking style and presence of fast-food chains that they do not have in Mongolia. It was a completely new world. For the first six months, she ate fast-foods and no F&V, started drinking alcohol and partying a lot. She could not cook and always ate from KFC and McDonalds, gained lots of weight and thought she needed to change. Her turning point was when her mother told her she looked chubbier and this put her off, thinking that she needed to get back to her old self. She resorted to eating more healthily and plans to do better in second year with a friend

Table 2

Interview Schedule

- Please share with me your background and lifestyle, the kind of food you eat back home.
- 2 Do you feel there is a big shift in all this, on coming to England?
- 3 Do you have an idea of the recommended daily intake of fruit and vegetables?

Probe: How do you know this information?

- 4 Do you have any programmes or policies in your home country concerning fruit and vegetable consumption?
- 5 What sort of foods do you consider as fruit and vegetables (in your country or here in the UK) Probes: a.) What sort of fruit and vegetables do you like to eat?
 - b.) How often do you eat such/fresh fruit and vegetables in a week?
- 6 Please tell me about the fruits that you hadn't tried before coming to England or that are not common in your country?
- Probes: a) Did you like the fruits? b) Any comparison to those you eat back home?
- 7 Why do you think it is important to eat fruit and vegetables? What is the value of eating F&V?
- 8 Do you often prepare your meals or do you prefer to eat at places such as fast-food restaurants?
- 9 Do you usually do activities like going out shopping, preparing and cooking meals with your flatmates?

Probe: Where do you shop? What are the frequent things on your shopping lists?

- 10 Why do you think many young people prefer buying fast food or prepared meals and not fruit and vegetable?
- 11 What do you find challenging concerning fruit and vegetable consumption or what is it about fruit and vegetable that you dislike?

Probe: Is it the shopping, preparation, cooking, variety?

- What do you think takes more time: premade food or fast foods or fruits and vegetables?
- 12 How has being away from home affected/ influenced your eating patterns, food preferences and meals especially fruit and vegetable consumption?
- 13 How do you rate availability and accessibility of fruit and vegetable here as compared to your home country?

How do you feel about eating fruit and vegetables while here? (Relating to quantity and quality).

Probe: Do you have any plans or strategies you have laid out to increase your consumption?

14 Other than eating fruit and vegetables on their own, are there other ways you eat them both here and back in your home country?

Prompt: for example, mixed with other food as part of meals, making fruit juices.

Results

The tone of participants' accounts was largely of surprise at the difference between their native countries and UK. There was also evidence of anxiety in participants' accounts in relation to establishing friendships, managing academic work and financial constraints.

Fast-food culture versus home comforts

Coming to the UK meant that the students were away from their familiar socio-cultural environment and had to learn how to behave within a different setting. The students mentioned that life in the UK had a strong attachment to fast-food compared to their home countries affecting their F&V consumption.

Benny: Fruit and vegetables is not a big thing for uni students even those who are born here. If fast-food was not popular then we would not have many restaurants and shops selling it everywhere, it is outrageous, it's like people are addicted to it.

A key concern was the significant availability and accessibility of fast-food compared to F&V, which for them led to reduction in F&V consumption.

Elizabeth: In Romania, you have people selling fruits and vegetables on the streets and you could just get it from anywhere and it's really good. Here, you have to go to a proper market or go to Tesco, Sainsbury's whatever, it's not as juicy and tasty anyway or sometimes you don't find what you are looking for which has affected my eating fruits and vegetables.

Fending for oneself

On moving to university, students expressed satisfaction in relation to their independence and freedom from parental influence.

Matthew: moving away from home means that I eat from where my parents do not see, away from all their comments so I become more free and feel free to choose what I want to eat and I feel am in control over myself and my choices. Peer influence became important in relation to food choices, which affected students F&V consumption.

Esther: When I came here I straight away started eating KFC and McDonalds, you know. I started hanging out with home students in everything you know they party hard, drink a lot but rarely eat vegetables or fruits (laughs)

Fending for oneself also meant learning how to shop for groceries in a new country. Some participants were either reluctant or could not cook and found it difficult to prepare healthy meals from scratch opting for ready meals or fast-food.

Matthew: Cooking made me think about what I eat and affected my daily routine so with the rice cooker, I could avoid instant food and going to the university café. With the rice cooker, I started looking for recipes of how to cook more healthy meals.

Matthew had been nicknamed "Instant King" because he ate instant noodles for the entirety of his first term at university before he bought a rice cooker.

Health is not a priority

Although the students were aware of recommended amounts of F&V in the UK and their own countries, they did not prioritise their health and this did not always influence their food choices.

Esther: I don't think I have it at the back of my mind that I need to eat this much fruits and vegetables and no one really talks about 5-a-day, I just read it on juice boxes.

Others pointed to the fact that they were still young, which meant that health was not prioritised and eating related conditions were considered irrelevant.

Daniel: Actually we don't always think about how much we are consuming even for fruits and vegetables. I eat so I don't feel hungry because I think am still really young, I don't think about the health concerns so I eat to fill myself up. What I eat, I don't care but the taste; I care (laughs).

Discussion

The differences to their native countries in relation to meal times, food availability, and fastfood culture expressed international students' experiences of living in the UK. Relocation into a new culture at a time of transition into adulthood meant that students had to acclimatise to a new way of living in an unfamiliar environment. The change of environment creates fundamental changes to students' subjective norms and perceived behavioural control in relation to F&V consumption. Moving into another culture, and living away from home had a significant impact on food choices and eating habits (Papadaki & Scott, 2002).

Understanding the effect of cultural diversity on F&V consumption is crucial, as international students require support to adjust to a new culture, lifestyle and diet. This could boost control beliefs in relation to their ability to consume F&V despite the environmental changes. Furthermore, the availability of fast-food restaurants close to university, which become meeting venues among friends may foster fast-food vs. F&V consumption (French, Story, Neumark-Sztainer, Fulkerson, & Hannan, 2001).

With university life structured around independent living, the newfound autonomy to shop, cook and prepare a meal from scratch was challenging, thereby affecting their perceived F&V. behavioural control to consume With increased autonomy and limited parental supervision, their subjective norms were affected as many students adopted lifestyles acceptable by peers making them susceptible to reduced F&V consumption, unhealthy eating, alcohol and smoking(Pearson, Ball, & Crawford, 2012). In circumstances where social pressure influences students' diet and eating habits, improving selfefficacy to resist peer pressure may be effective they called me instant king

(Bruening, Kubik, Kenyon, Davey, & Story, 2010).

Eating F&V became an exception rather than the norm influenced by the easy accessibility of fastfood or ready meals perceived as tastier, cheaper, convenient and quicker (Edwards & Meiselman, 2003) reflecting the negative impact of the 'McDonaldization' of university life(Ritzer, 2008). Health was not always a motivator for students' food choices as their behavioural beliefs that health was not a priority influenced their attitudes and intentions towards F&V consumption.

Recommendations

In order to change international students' eating behaviours and food choices in a way that will increase their F&V consumption, campaigns should include composite initiatives tailored towards addressing the need for F&V consumption beyond providing information. They need to tackle the context in which students are living, their motivations and intentions for choosing F&V, and their skills in relation to grocery shopping on a budget and cooking meals from scratch.

International students need a bespoke approach, as the context in which they are situated is foreign compared to home students. They are prone to acculturative stress due to cultural transitions from marked differences between their native countries compared to the UK. Additionally, the diversities of the international students' backgrounds creates a multi-faceted population with а lack of homogeneity in various spheres - culture, eating behaviours and lifestyle. Therefore, little generalisation of interventions is feasible.

Conclusion

The students experienced significant changes in their eating habits and lifestyle patterns since going to university overseas. Many students were able to recognise and confirm their current decline in F&V and increase in fast-food consumption. Tackling F&V consumption among this group is complex and requires addressing their attitudes towards F&V, rewarding health subjective norms, encouraging positive perceived behavioural control and fostering their intentions to consume F&V. International students may have intentions and strive to consume the recommended F&V intake; however, these intentions are rarely transformed into behaviour due to lack of implementationintentions like planning the meals, shopping, preparing and cooking the F&V and lack of knowledge of the recommendations.

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