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What is the status of food literacy in Australian high schools? Perceptions of home economics teachers

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ABSTRACT

The high school setting has been identified as an ideal setting to teach adolescents about healthy dietary behaviours. This study explored home economics teachers' (HETs) views on the role of high schools in enhancing adolescents' food literacy and promoting healthy dietary behaviours. Semi-structured interviews with 22 HETs were conducted. The interview questions focused on the perceived strengths/opportunities and the limitations/barriers in enhancing adolescents' food literacy and healthy dietary behaviours in Australian high schools. Thematic data analysis was used to identify five key themes from the interview transcripts: (1) the standing of food-related life skills; (2) food literacy in the Australian school curriculum; (3) emphasis on resources; (4) learning through school canteens; and (5) building a school to home and community nexus. Overall, HETs reported that home economics was regarded by parents and other school staff to be less important than Maths or English for adolescents to learn in Australian high schools. Some teachers indicated that their schools offered one year compulsory teaching of food related studies which is typically delivered in the leaning areas of Technologies or Health and Physical Education (HPE). However, HETs stated that the time was insufficient to develop sustainable food-related life skills and introduce broader concepts of food literacy such as environmental sustainability. The lack of financial resources and non-supportive school food environments, including school canteens, were reportedly major factors that prevented food literacy education and healthy dietary behaviours of adolescents. Increasing the status of food literacy education in schools would support adolescents to develop food-related life skills and mobilise them as agents of dietary behaviour change in the home setting.

1. Introduction

Unhealthy dietary behaviours have individual health consequences which, in turn, can have serious implications for population health (WHO, 2014). Adolescence is a life-stage of growing capacity, including increasing food and nutrition knowledge and skills required for developing healthy dietary behaviours (WHO, 2014). Unhealthy dietary behaviours during adolescence are an identified risk factor for non-communicable diseases such as overweight and obesity (The Lancet, 2012). Over one quarter of Australian adolescents are overweight or obese (ABS, 2015). The Health Promoting Schools framework encourages health enhancing school environment and supports adolescents to develop personal skills for developing healthy behaviours including food and nutrition (WHO, 2014).

High schools have a vital role in delivering food and nutrition education for adolescents and creating an environment that promotes healthy dietary behaviours (Bonell et al., 2013; Fulkerson et al., 2011). Food and nutrition education is most effective when it aims to stimulate learning, literacy, skills and action (Contento, 2008; Hawkes et al., 2015). The concept of food literacy has recently emerged which broadly consists of food and nutrition knowledge, skills and capacity, which are collectively required to

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make informed food choices and improve dietary behaviours (Hawkes et al., 2015; Vidgen & Gallegos, 2014). Food literacy is described as *"the scaffolding that empowers individuals, households, communities or nations to protect diet quality through change and strengthen dietary resilience over time. It is composed of a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine intake"* (Vidgen & Gallegos, 2014). Adolescents who possess sufficient nutrition knowledge and skills are more likely to adopt and sustain healthy dietary behaviours during schooling and throughout the rest of their lives (WHO, 2003). In line with this, it has been proposed that increased food literacy underpins increased food and nutrition knowledge (Tsartsali, Thompson, & Jago, 2009; Venter & Winterbach, 2010); food skills (Caraher, Seeley, Wu, & Lloyd, 2013) including self-efficacy for cooking, food preparation techniques and frequency (Santarossa, Ciccone, & Woodruff, 2015). Also, food literacy has the potential to modify adolescents' dietary behaviours (Larson, Perry, Story, & Neumark-Sztainer, 2006; Vaitkeviciute, Ball, & Harris, 2015), including increased consumption of fruit and vegetables (Burrows, Lucas, Morgan, Bray, & Collins, 2015; Utter, Denny, Lucassen, & Dyson, 2016), healthy food-related preferences, attitudes and behaviours (Hersch, Perdue, Ambroz, & Boucher, 2014).

Environmental factors strongly influence adolescents' dietary behaviours (Contento, 2008; Hawkes et al., 2015). Programmes that improve high school food environments have been recognised as a promising approach for improving dietary behaviours during adolescence (Viner et al., 2012) as they spend a significant amount of time in school and consume a large proportion of total daily energy in this setting (Story, Neumark-Sztainer, & French, 2002). Although improving adolescents' food and nutrition knowledge and skills are important, these alone are unlikely to improve adolescents' dietary behaviours (Dick & Ferguson, 2015). A systematic review of the literature found that adolescents who had positive perceptions regarding school environment were more likely to engage in health promoting behaviours (Jamal et al., 2013). Australian adolescents have previously indicated that high schools should provide them with an opportunity to develop food skills, for example through cooking lessons, and also be a health-supportive environment (Stephens, McNaughton, Crawford, & Ball, 2015). All high schools are therefore recommended to create a healthy preference-learning environment, such as through repeated and sustained exposure to healthy foods (eliminate unhealthy foods) and comprehensive food literacy education for students, teachers and catering staff (Hawkes et al., 2015; Stephens et al., 2015).

The Australian national curriculum sets a framework for all Australian students that should be taught through foundation to Year 10 (ACARA, 2015). However, the implementation of the Australian national curriculum is flexible and varies between states and territories, and between sectors, that is public, independent and Catholic education sectors. Each school also develops tailored local curricula that meet the needs of their students, hence, the subjects offered could vary between schools, sectors, states, territories. Food related topics are mostly covered in the learning areas of Health and Physical Education (HPE), Technologies and Science (ACARA, 2015). A focus on food and nutrition supports adolescents in developing food and nutrition knowledge and food skills to make informed food choices and explore the contextual factors that influence dietary behaviours (ACARA, 2015). Home economics is a subject offered in some states and territories where food and nutrition is taught comprehensively and provides opportunities for adolescents to gain theoretical knowledge and understanding of food and to develop food skills through practical activities (Pendergast & Dewhurst, 2012; Ronto, Ball, Pendergast, & Harris, 2016). Some schools use different nomenclature for subjects where adolescents could increase their food literacy, however, for the purpose of this study, all associated subjects have been captured under the broad umbrella term 'home economics'. Home economics teachers (HETs) have a significant role to play in enhancing adolescents' food literacy as they have nutritional background and pedagogical expertise to provide food literacy education to adolescents. To date, one Australian study has explored HETs' views on the environmental factors of food literacy in high schools (Ronto et al., 2016). A more interactive approach was needed to explore the role of high schools in enhancing adolescents' food literacy and providing a healthy food environment. This understanding would help to develop more comprehensive public health initiatives for adolescents that could support them in making informed food choices and increase consumption of healthy foods such as fruit and vegetables. It is in this context that this study aimed to explore HETs' perceptions on the role of high schools in enhancing adolescents' food literacy and healthy dietary behaviours.

2. Methods

2.1. Participants

This study applied a semi-structured interview approach to explore the perceptions of HETs on the role of Australian high schools in enhancing adolescents' food literacy and healthy dietary behaviours. An introductory email was sent to a randomised selection of HETs (n = 60/91) who had participated in a survey-based research project on food literacy in high schools in Australia (Ronto, Ball, Pendergast, & Harris, 2016) and provided consent to be contacted for future research opportunities. Twenty seven HETs replied to the email sent by the research team. An information sheet and a consent form were emailed to potential participants. 22 HETs scheduled an interview.

2.2. Procedure

Data were collected via semi-structured face-to-face (n = 2) and telephone (n = 20) interviews with HETs across Australia during January–February, 2015. Semi-structured interview questions were piloted with the first two HETs (face-to-face). Very minor modifications to wording were made and no removal or addition of questions occurred. For this reason, pilot data were included in the present analysis. Interview questions were developed to cover key areas of investigation, and participants were encouraged to expand on those key areas. First, participants where asked their understanding of the concept of food literacy in order to establish their understanding of this concept. Then, participants were asked questions that focused on the following areas: (i) identification of strengths and opportunities in enhancing adolescents' food literacy and healthy dietary behaviours in high schools in Australia (e.g. What opportunities does your school have in improving adolescents' food literacy?); and (ii) identification of limitations and barriers in enhancing adolescents' food literacy and healthy dietary behaviours in high schools in Australia (e.g. What are the barriers you are facing in teaching food literacy to adolescents?).

Teachers were informed that the interviews would be audio-recorded and the information provided would remain confidential. All interviews were conducted by a single interviewer (RR). Each interview lasted between 15 and 30 min. The interviewer took notes during the interview to facilitate data analysis. Ethical approval was granted from the Griffith University, Human Research Ethics Committee (Reference number MED/57/14/HREC).