Implementing healthy food policies in health services: a qualitative study

AUTHOR(S)

Tara Boelsen-Robinson, Miranda Blake, Kathryn Backholer, Janitha Hettiarachchi, Claire Palermo, Anna Peeters

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Authors:

Corresponding author: Tara Boelsen-Robinson

- Master of Public Health
- PhD Candidate and Associate Research Fellow
- tara.b@deakin.edu.au
- School of Public Health and Preventive Medicine, Monash University, Level 5 Alfred Centre, 99 Commercial Rd, 3004, Melbourne, Australia. +61 (0)3 9244 5426
- Global Obesity Centre, School of Health and Social Development, Deakin University, Locked Bag 20000, Geelong, 3220, Australia

Miranda R. Blake, Bachelor of Nutrition and Dietetics (Honours), Accredited Practising Dietitian

- PhD Candidate and Associate Research Fellow
- School of Public Health and Preventive Medicine, Monash University, Level 5 Alfred Centre, 99 Commercial Rd, 3004, Melbourne, Australia. +61 (0) 413 554 232
- Global Obesity Centre, School of Health and Social Development, Deakin University, Locked Bag 20000, Geelong, 3220, Australia
- Miranda.Blake@monash.edu

Kathryn Backholer, Doctor of Philosophy

- Senior Research Fellow
- Global Obesity Centre, School of Health and Social Development, Deakin University, Locked Bag 20000, Geelong, 3220, Australia. +61 3 924 43836
- Kathryn.Backholer@deakin.edu.au

Janitha Hettiarachchi, Doctor of Medicine

- Consultant Community Physician
- Department of Clinical Diabetes and Epidemiology, Baker Institute, Level 4 Alfred Centre, 99 Commercial Rd, 3004, Melbourne, Australia.
- Janithahetti@gmail.com

Claire Palermo, Doctor of Philosophy, Accredited Practising Dietitian

- Associate Professor
- School of Clinical Science, Monash University, Level 1 264 Ferntree Gully Rd, Notting Hill, 3168, Australia. +61 3 9902 4263
- Claire.Palermo@monash.edu

Anna Peeters , Doctor of Philosophy

- Professor
- Global Obesity Centre, School of Health and Social Development, Deakin University, Locked Bag 20000, Geelong, 3220, Australia. +61 3 92445423
- Anna.Peeters@deakin.edu.au
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Abstract:

Aim: In 2012 a large Australian metropolitan health service introduced a healthy food policy, where there was a requirement for food and drinks for sale within retail stores to conform to standards based on macronutrients and energy content. The aim of this study was to evaluate the experience of those implementing a healthy food retail policy in order to inform the translation of such policies into other organizations. **Methods:** A qualitative approach was used, with semi-structured interviews exploring informants' involvement in, experiences of, factors affecting, and perceived outcomes of policy implementation. Interviews were conducted with seven individuals participating in the introduction of the healthy food retail policy. Results were analysed using a thematic analysis approach. **Results**: Four themes and twenty-one sub-themes were identified, with analysis interpreted using the socio-ecological model. Participants identified that successful policy implementation hinged on the provision of resources and support by the health service to the retail staff. Trusting relationships between retail and health service staff were built through effective and frequent communication. The fear of tensions between the policy and business income had significantly lessened after implementation. A key factor contributing to this change was the use of low-risk trials to remove less healthy products or introduce new healthier foods. **Conclusions:** Implementing a healthy food retail policy within a health service benefits from dedicating resourcing, investment in relationship building with key stakeholders, and introducing changes gradually with a long-term approach.

Key words: policy, food services, health services, public health nutrition, qualitative research

Introduction

Poor nutrition is the greatest behavioural risk factor for burden of disease worldwide, acting through obesity, cardiovascular diseases, diabetes, and cancers.[1] Improving the healthiness of currently obesogenic consumer food environments is an essential strategy to improve population nutrition and reduce ensuing chronic diseases.[2-4] Food service retailers within health-promoting settings (such as hospitals and health services, local councils, recreation providers, workplaces, and parks) may be a natural starting point to implement policies designed to promote healthy food consumption due to a natural alignment with their core goals of health promotion.[5, 6]

However, sustainable, at-scale uptake of these policies has been limited in part due to the current paucity of research identifying factors which drive successful implementation. Within the existing literature, there has been some exploration of the experiences of retailers involved in healthy food interventions,[7-17] and some research drawing on researchers' own experiences of implementation.[7, 8, 16, 18] However, there is little literature capturing the comprehensive experiences of implementation, across the range of stakeholders involved in designing and implementing the policy.

Given the complexity of making changes to a system such as food service retail, gaining a variety of perspectives is critical to help us understand, and address, the current inertia in shifting to the provision of healthier foods and beverages,[19] even within health-promoting settings. A potential example is provided by a large metropolitan health service in Australia who adopted state-government healthy food and beverage guidelines ('Healthy Choices')[20] as a mandated, organizational healthy food policy ('policy') in 2012. *Healthy Choices: food and drink guidelines for Victorian public hospitals* ('Healthy Choices') was released in 2010 by the Victorian state government. Healthy Choices guides hospitals to limit the availability and

promotion of less healthy foods and beverages, and increase the availability and promotion of healthier alternatives. [20]

These guidelines are based on the Australian Dietary Guidelines [21, 22] and the Australian Guide to Healthy Eating. [23] Healthy Choices categorizes foods and beverages based on their macronutrient and energy content as; 'red' items, whose intake should be limited, 'amber' items that should be chosen carefully, and 'green' items, the healthiest choices. Healthy Choices recommends that fewer than 20% of available products are in the 'red' category, and at least 50% are categorized as 'green'.

This study aimed to evaluate the experience and perspectives of those implementing the healthy food retail policy within an independent food retailer located on site of a health service, in order to inform the translation of such policies into other organizations.

Methods

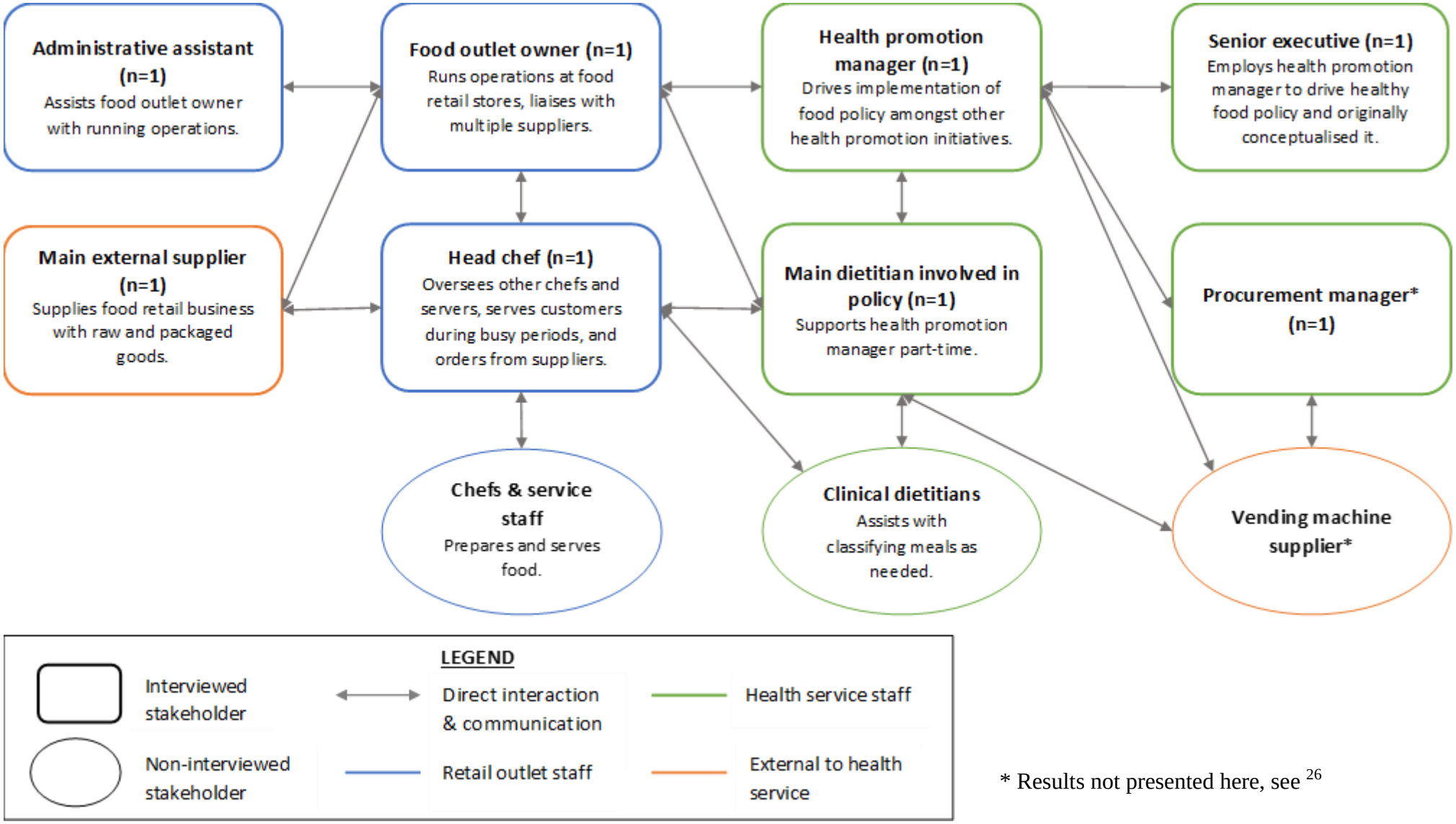
This study employed a qualitative approach in order to evaluate the implementation of a healthy food retail policy within a health service setting. The authors sought to explore how the policy was experienced by key personnel directly involved in its development and implementation. This study was grounded in the theory of social-ecology, which acknowledges the multiple levels of factors (intrapersonal, interpersonal, organizational, community context and public policy) that influence health behaviours and interventions designed to change them. [24] The socio-ecological model is commonly utilized to examine the implementation of public health policies and programs [25] and allowed us to evaluate experiences from multiple perspectives.

There were five independently-owned food retail outlets at the health service. A central cafeteria area served hot and cold food, a juice bar, and a coffee shop/café, while a separate café onsite included a sandwich bar, hot food, and coffee. Additionally, there was a

convenience store located onsite that was not under the purview of the policy. When the policy was initially introduced, these four outlets were owned by a number of different individuals, not including the food outlet owner (owner) interviewed here. The owner interviewed in this study came to own all of the above mentioned retail outlets during the course of the policy implementation and by the time of the interview.

The health service has between 8,000-10,000 employees, while the food retail outlets employee between 60 and 70 individuals. The relationships between individuals and groups within both organisations are represented in Figure 1,[26] as are the individuals' roles as related to the implementation of the healthy food policy. While the policy was not tied into contractual agreements with the food outlet owner, its implementation was expected at a senior management level and prioritised by the health promotion manager tasked to oversee implementation.

Figure 1: Schematic representation of the key stakeholders, their tasks and involvement in the implementation of the Healthy Choices policy, and the interactions between them



* Results not presented here, see [26]

Purposive sampling[27] was used to select staff who were either actively involved in the implementation or whose work may have been impacted as result of implementation, and who represented a range of different roles in the implementation pathway, including both health service and food retail staff. The first and senior author arranged a meeting with the health promotion manager at the health service (who had a substantial role in implementation) within which four key informants were initially identified. The health promotion manager was also invited to participate. Two further stakeholders were identified by the interviewees during the initial interviews. Stakeholders were approached by the health promotion manager by email or verbally. Key informant sampling enabled the researchers to purposively sample participants who were most likely to have the greatest experience and knowledge[27] of healthy food policy implementation within this context. For example, the head chef managed all other chefs to undertake food preparation, and was therefore qualified to reflect on their experiences as well as his own. Stakeholder interviews were conducted until a sufficient story had emerged to provide insight into the qualitative study and to answer the research questions.

In-depth, semi-structured interviews were conducted. Two researchers were present at each interview (AP, TBR). Both researchers are in the fields of obesity and public health, and as the senior researcher AP supported TBR, a more junior researcher in data collection. AP and TBR alternated leading the interview, and keeping field notes (observations of interest), checking that key areas of discussion had been covered, and formulating additional questions that were asked at the end of the interview. Interviews were conducted face-to-face at a location and time convenient for participants (which was in all cases their places of work), excluding one interview which was conducted over the phone for convenience. Interviews employed a descriptive method of enquiry,[28] focusing on evaluating the process of policy implementation[29] and stakeholders perspectives of the policy's impact.[30] Questions were

developed to focus on evaluating the policy's implementation with consideration of the socio-ecological model guiding the evaluation (Table 1). Specific lines of questioning were categorised to different levels of the socio-ecological model in order to ensure questions reflected the potential interplay of the policy on these different levels (Table 1).

Table 1: Logic of enquiry and line of questioning

Logic of enquiry	Line of questioning	Level of socio-ecological model examined
Stake and involvement in intervention	Role at health service and in implementation	Organizational
Experience of intervention	Changes to daily work requirements as result of policy implementation	Intrapersonal
	Changes to skill or knowledge as result of involvement in policy	Intrapersonal
	Changes to attitudes to healthy retail as result of involvement in policy	Intrapersonal
Factors affecting implementation	Other individuals' roles in implementation	Intrapersonal
	Organizational factors affecting response to the policy	Intrapersonal
	Resources available for policy implementation	Interpersonal
Perceived outcomes	Effect of policy on working relationships	Interpersonal
	Customer reactions to policy	Organizational
	Impacts of the policy on food retail business	Organizational
Personal outcomes	Personal impacts of policy	Organizational
Translation potential	New products or strategies used	Community
	Advice to another person or organization implementing similar policy	Public policy
General future needs	Aspects of Healthy Choices that could be improved	Interpersonal

From the specific lines of questioning, a discussion guide was developed for each stakeholder based on their professional domains of knowledge (e.g. the head chef was asked questions pertaining to potential changes in cooking methods as a result of the policy). The discussion guide was iteratively adapted as new questions emerged from preceding interviews,[31] allowing researchers to direct aspects of each interview, while enabling the exploration of

new themes and concepts as they emerged. An experienced qualitative researcher (CP) assisted in the development of the discussion guides. Interviews were audio-recorded and transcribed verbatim, and participants were given the opportunity to verify their transcripts. Immediately following each interview, key concepts and themes were privately discussed by the researchers to document subjective interpretations and inform future lines of enquiry in subsequent interviews. Interviews were conducted from November 2015 to February 2016. A few months later, the retail outlets within this study met the Healthy Choices policy requirements.[32]

Initially open-coding was employed providing labels to pieces of transcribed text.[33] In particular an inductive, block and segment approach was used, whereby abstract labels or labels identified in the text itself were assigned as they emerged from the data. Coding was undertaken independently by two researchers (TBR and MB), who came together to confirm the findings and then refine the coding labels, which were grouped into common topics and became the sub-themes. Findings were then discussed in the context of the research question and sub-themes consolidated with a third researcher (AP) to create the overarching themes. NVivo 10 (QSR International Pty Ltd, Melbourne, Victoria, Australia) was used as data management software. Ethics was approved by the health service ethics committee (project number 520/15).

The researchers were experienced in policy evaluation and public health, and had participated in qualitative training in order to undertake this evaluation. Their relative inexperience in qualitative methods meant that they brought little established conceptual expectation to the data analysis initially until this analysis was interpreted with use of theoretical models, in particular socio-ecological theory. Authors adhered to the COnsolidated criteria for Reporting Qualitative research (COREQ) checklist.[34]

Results

All stakeholders approached agreed to participate (n=7). The health promotion manager overseeing the intervention, a dietitian from the hospital offering support to the health promotion manager, a senior executive at the hospital who had been identified by the health promotion manager as driving the changes, and the owner, head chef, external food supplier, and administrative assistant of the main food outlet on site at the hospital were interviewed. Interview length ranged from 24-86 minutes (median 58 minutes). Four key themes and seventeen sub-themes emerged from the interviews (Table 2). Participants were grouped collectively as either 'food retail staff' which include the owner, head chef, and administrative assistant, or 'health service staff' who include the senior executive, health promotion manager, and dietitian.

Table 2: Summary of themes and sub-themes

Themes	Sub-themes
Resources and support	Increased time and effort for service staff Dietitians accessible Senior executive as champion Appointment of health promotion manager Increased time for supplier
Communication	Engagement with food outlet owner Public acknowledgment of success Communication with customers
Tension and balance	Initial skepticism and concern from food retail staff Negative customer reactions Disruption of standard chef practices Balancing priorities of health and financial viability Change in ownership of retail outlet
Passion	Health promotion manager dedication Opportunity to contribute to public health Healthy food as a competitive advantage Provision of customer service

Following is a description of the implementation of the policy, followed by the key themes (which are **bolded)** and sub-themes (*italicised)* that emerged from the interviews.

The senior executive, after gaining the support of the health service's Executive Committee, appointed the health promotion manager to engage in a number of health promotion activities, including healthy eating. The Healthy Choices guidelines provided a framework from which the health service staff could develop their healthy food policy, as well as a useful resource for policy implementation, for example as a reference for classifying foods and drinks. Participants reported that the health promotion manager built up a strong relationship with the owner over time by maintaining contact and engaging in informal communication.

Short-term trials were co-developed between the food retail owner and the health service staff. These trials focused on introducing healthier options or removing less healthy options one at a time within specific categories (e.g. sugary drinks, fried foods, or salads). The trials were evaluated by the health service staff, often with the aid of dietetic students or researchers, including customer surveys and analysis of sales data provided by the owner. The use of trials allowed for the reporting of results, and the change to be experienced by retail staff before the trials became long term changes. These trials promoted healthy food while remaining business neutral, or even attracting customers – giving the owner the confidence to suggest and initiate his own trials and changes to promote healthy foods beyond suggestions of the health service staff. Trials such as these have been conducted throughout the health service.[35] Food retail staff were also supported with clinical dietitian's onsite, who could give input to the healthiness of foods.

The provision and use of **resources and support** were identified as a key theme. Increased *time and effort* was required to create recipes and source products for and produce healthier

dishes for the food service staff. Healthy Choices often required an expert understanding of nutrition and new recipes had to be approved by a dietitian. However, the health service staff recognised that their *access to the clinical dietitians* reduced the time required to identify healthier alternatives to existing recipes and correctly implement the policy.

> *"[There are more demands] when we have to make up a menu… especially for the kitchen side of things. Because there's a lot more research involved."* (Head chef)

The *senior executive was a champion* of the concept that a health service should promote health in all of its activities, and this message strongly resonated with all participants – giving them a sense of shared purpose. The senior executive's direct *appointment of the health promotion manager* gave her influence within the organization, and enabled her to engage productively with different individuals to make changes. Furthermore, this appointment as an ongoing position signalled the long-term support for healthy eating initiatives, while implicitly acknowledging that the changes may take time.

Finally, the outlet's *supplier went out of his way* to source healthier products for the owner, illustrating how a policy implemented at a retail level could influence a supplier's repertoire of healthier product ranges.

The importance of **communication** emerged strongly from the interviews. The health promotion manager would casually 'drop by' the retail outlet for informal chats with the owner. This *frequent contact* developed trust, and allowed the owner to be receptive to implementing small trials, and incremental changes towards healthier food availability. The frequent communication allowed the owner to voice his concerns and offer feedback on how the policy implementation was going, enabled quick responses to perceived issues, as well as prompt action on ideas the owner sought to implement. The health promotion manager further updated the senior executive to maintain engagement and support for the policy at an

executive level. She coordinated opportunities for the senior executive to *publically acknowledge* the success in increasing healthy food availability, which kept retail staff motivated to continue and gave them pride in their work.

> *"Acknowledgement at exec level, board level meetings, or our CEO just wandering past and shaking hands and saying, great job…that means a whole lot [to the food retail staff]."* (Health promotion manager)

Communication between the food retail staff and customers was identified as integral to convey the changes and responding to concerns. The retail staff reported using *informal customer feedback* to gauge the success or failure of new foods, and this was used to develop foods to be more palatable. Food retail staff were able to encourage customers to try new food due to their existing relationship with them

> *"I try and communicate a lot…[Customers] tell me the bad things as well…I can feed off that."* (Head chef)

Tensions and the need for balance as a result of policy implementation was another key theme. Food retail staff reported that they were *fearful* that the healthy changes would not be accepted by customers, and that this could potentially affect jobs at the outlet. Some initial *negative customer responses* further played to these fears, however these become more positive over time, despite ongoing shifts to healthier options.

> *"I actually thought [the owner] would lose money…I just kept thinking to myself, "I don't know about this."…[the customers will] walk away and look somewhere else."* (Administrative assistant)

> *"…you can see it working and you can see lines at the salad bar at lunchtime, and you can see that the hot [fried] side's not as busy."* (Head chef)

Introducing healthy cooking guidelines was seen to *disrupt the standard chef mode of operation* of maximizing taste, requiring the limiting of some popular cooking methods (e.g. deep-frying) or generous use of ingredients (e.g. sodium). The chef had to adapt to these requirements while still providing palatable meals. Communicating this to the other chefs at the outlet was somewhat difficult, with some staff being resistant to the changes. Informal training for the retail staff was required so that they could communicate these changes to customers.

Having healthy food in a retail setting was conceptualized as a balance – the health service and the owner recognized the importance of the other's perspectives and ultimate goals, and tried to reach a compromise that satisfied all parties. The owner and health service staff identified the importance of *maintaining a balance* between providing healthy foods and financial viability of the retail outlet. Retail staff reported being more willing to engage in new ideas and being adaptable as they viewed it as essential to maintaining the existing business relationships. However, there were tensions in handling multiple, and sometimes competing, priorities. For example, some customers were unhappy with the changes and this was conflicting for the owner who sought to keep his customers happy as well as adhere to Healthy Choices and thus maintaining a good relationship with the health service.

> *"…it's more identifying how can we make…a balance, a balance in everything."* (Owner)

> *"…if you've got a retailer who's going to be there for the next five years, you have to find an arrangement that provides a win for him or that organisation as well as for the [health service]… it's about finding the win wins."* (Senior executive)

Following the policy being announced, one of the *retail food outlets was sold*. This was initially a challenge as significant effort had gone into the relationship with the previous

owner. However, the health promotion manager reported that the new owner (the owner interviewed here) was more receptive to making changes.

Passion emerged as the final key theme from the interviews. A number of stakeholders identified that *the health promotion manager's engagement*, passion and proactive nature positively influenced policy uptake.

> *"[The health promotion manager] assist[s] you and when someone else is passionate about what they're doing, and you're passionate, it makes it a lot easier."* (Owner)

Many participants identified themselves as being motivated to contribute to the introduction of a policy in order to *promote health*. There was a shared perspective that the health service should be engaging in health promotion practices within its own sphere of influence. Food retail staff were proud that they could contribute positively to their customer's nutrition, while the introduction of the policy made them consider the impact of the food they sold on other people's health. The supplier reportedly sought out healthier foods and brought them to the owner's attention. The health service's support and engagement with the owner meant that he was able to take ownership of the changes and in turn become passionate about them.

"We had a great relationship with [the owner]. He was really passionate and became more passionate about it as he could see people engaged in a process and he could see how he was actually impacting on people's health." (Dietitian)

While initially sceptical of the changes, the owner was driven to seek new opportunities and challenge the status quo, a factor he believed was essential to remaining a *viable business*, a perspective also shared by his supplier.

> *"…all these people being more [health] conscious, more educated, more knowledgeable about what they eat … there's no question in the end, [this will] influence business owners*

to start thinking, hey I've got to do something or else I'll lose business." (External supplier)

Food retail staff, in particular the head chef, was passionate about providing customers, in particular regulars, with a *satisfactory service*. Following the policy implementation, providing the customers with options that were not only palatable, but also healthy, was seen as an essential aspect of providing a good service.

Discussion

This is the first study to conduct an in-depth evaluation of the factors affecting the healthy food policy implementation by an independent retailer within a health-promoting setting. We interviewed a wide range of stakeholders, each involved in a different aspect of policy implementation. Results have been interpreted in the context of the socio-ecological model. [24] Intrapersonal factors influencing policy implementation included having a health promotion manager who was passionate and hands-on, and strong executive leadership, while recognising that the policy also increased food retail staff workloads. The importance of strong relationships between stakeholders through regular and effective communication was identified. While stakeholders were united in a desire to promote health through healthy food retail by the end of policy implementation, the food retail staff continued to balance this with the desire to meet customer needs. Important organizational factors identified included dedicated resource support from dietitians who could classify the healthiness of items, the use of trials, and feedback on trial outcomes. Policy implementation was characterised by the health service supporting the food service outlet, and the bi-directional communication between them. The sum of these factors alleviated the potential tension between health and business outcomes that is likely to exist in most retail settings looking to increase the healthiness of their offering.

Whilst there is no comparable literature examining healthy food policy implementation within health-promoting settings, previous research has been conducted in independent restaurants and small grocery stores. In this study, we identified four important themes: resources and support, communication, tensions and balance, and passion. Elements of these have been reflected in the literature including the importance of providing resources, such as dietitians, to reduce the cost and/or time investment for a remote grocery store retailer [9] and independently-owned restaurants.[8, 13] Similar to findings from this study, the long-term support from those initiating the changes (e.g. government or researchers) was reported to help the retailer sustain healthy food changes in restaurants [13] and grocery stores.[14] The head chef in this study reported that increased time was needed to prepare healthier items, in contrast to research by Hanni et al where healthier restaurant foods required less time.[8] In the findings from this study, frequent communication and investments in relationships was seen as essential in keeping retail staff engaged, results echoed in previous literature examining restaurants[8] and grocery stores.[9, 11, 16]

Similar to this study, tension in implementing a healthy food policy was a common theme identified in grocery store policy implementation, centring on fear of lack of customer interest and losing business, [10, 11, 16, 17, 36] and in difficulties in motivating staff participation.[16] Contrary to their expectations, the retail staff in this study reported an increase in customers, comparable to other studies where a perceived benefit to restaurants' business was reported.[7, 13] In line with the outcomes of this study, retail staff recognized the need to balance healthy food provision with positive business outcomes[7, 36], became motivated in part to improve community health through healthy food provision [11, 16] and perceived themselves as gatekeepers to a healthier community.[8] Making gradual changes over time contributed to successful policy implementation in our study, which is parallel to experiences of participants within small store interventions.[18]

In the current study, the owner viewed a shift to healthier food offerings as being innovative and essential to staying viable – this has not been reflected in the wider literature apart from one previous study where a small retailer identified stocking fresh fruit and vegetables as an advantage to competing with larger supermarkets.[11] This belief is a reflection of the marketing 'first mover advantage' theory, where the first entrants to a new market gain a competitive advantage over later entrants. [37] Healthy food provision as a concept may be more likely to resonate with other retailers who have similar business outlooks.

A strength of this study is its use of multiple stakeholder perspectives.[38] This gives insight into the perspectives and experiences of both the retailer, and the broader organizational level of the health service implementing a healthy food initiative. Examining the perspective of the food supplier is a novel approach in examining the flow on effects of policy implementation.

There are some limitations to this study. Participants were limited to those occupationally involved in policy implementation. Thus, the experiences of other stakeholders, such as customers, is not captured. While some specifics of the experiences of these participants may be limited to retailers within broader health-promoting organizations, it will be important to explore the extent to which these findings can be extended to other café-style, independently-owned retailers. Furthermore, the size of the retailer may influence the generalizability of these results – for example, a smaller retailer may not be able to absorb extra time commitments required to create healthier dishes with existing capacity, or may have fewer supply options. While the details of healthy food policies differ, the tenet of providing healthier foods and reducing the availability of unhealthier foods is transferable to multiple contexts.

The current lack of healthy options within most food retail environments, and the generally low uptake of healthy food policies and strategies [7] despite the demonstrated feasibility of

such approaches in some settings [39, 40] highlight the importance of unpacking the factors associated with successful healthy food policy implementation. Retailers in health-promoting settings – such as health services – are an intuitive starting point for these settings-based policies as they are largely servicing those with professional (staff) and personal (visitors and patients) experiences of poor health outcomes. The findings from this study suggest that interpersonal factors together with organisational-level support are key elements of socio-ecological model that should considered in the implementation of future retail interventions.

While this policy was aimed at supplying a wider range of healthier foods, the importance of generating customer demand for these products has also been recognized,[7] and could be considered as additional, additive strategies complementing availability policies.

This in-depth exploration of the introduction of a healthy food policy across a large health service indicates that implementing a healthy food retail policy within health-promoting settings requires resource dedication, investment in relationship building with key stakeholders, and a long-term approach with gradual introduction of changes. Retailers in health-promoting settings may be a key leverage point for creating healthier food environments within local communities, and their successful implementation can promote the widespread implementation of healthy food policies in other retail settings.

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