Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Healthy Eating

by

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Abstract

Background: Canada is witnessing a growing recognition on the importance of food literacy; knowing how to purchase, prepare, and eat healthy food. Previous research has shown these core competencies can contribute to healthy eating. This is supported with the recent inclusion of certain competencies in Canada's updated Food Guide. Exposing children to food literacy opportunities can positively promote lifelong healthy eating behaviours and prevent risk of disease and obesity. Currently, Canadian youth have limited opportunities to develop their food skills at home due to women entering the work force and a growing reliance on convenience foods. As a result, schools have become a key secondary learning environment. It is subsequently a public health concern that junior high food skills education (FSE) courses in Alberta are voluntary.

Research Purpose/Objectives: The research purpose of this paper-based thesis was to uncover whether junior high students and staff associate learning about nutrition and food skills with lifelong healthy eating behaviours. For Study 1: "Is Learning to Cook Optional?" an objective was to investigate how gender and perceived academic value may impact a youth's perceptions and enrollment in food skills education courses. For Study 2: "Food Skills; an Academic Course?" an objective was to identify barriers and facilitators to the effective implementation of school-based food skills education courses.

Methods: Focused ethnography was used as it allowed the researcher to explore specific research questions in a feasible timeline. Data generation consisted of semi-structured interviews with ten students, three principals, and three FSE teachers. Latent content analysis was the selected analytical tool. Through a cyclical process, primary patterns in the data were identified, coded, and categorized.

Results: Study 1: “Is Learning to Cook Optional?” consisted of four main themes: Learning, Family, Gender, and Independence. Gender was significant as mothers remain primary educators for food skills and female students felt pressured to enroll in FSE courses. In Study 2: “Food Skills; an Academic Course?”, four main categories emerged: Promoting Healthy Eating, Curriculum, Job Qualifications, and Budget. Participants often recognized the value of FSE courses but identified budget limitations and scheduling restrictions as barriers to sustainable implementation. Promoting healthy eating was considered a school responsibility which resulted in support for the incorporation of further healthy eating initiatives.

Implications: This research project had implications for the professions of both health promotion and education. A recommendation for practice includes schools encouraging teachers with a limited background in food literacy to attend professional development opportunities. School policies may need to be adapted to ensure an equitable distribution of funds beyond core courses. Health promotors should ensure the youth perspective is considered when developing healthy eating initiatives to enhance their potential for success. This research project also promotes a community-based approach when developing and implementing health promotion initiatives. The impact of academic prioritization and role of parents were identified in both studies as barriers that require further research.

Keywords: Healthy Eating, Food Skills Education, Qualitative Research, School-based Research, Focused Ethnography, Canada

Preface

This thesis is an original work by Shelby Laine Johnson. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Healthy Eating”, No. Pro00085426, March 11, 2019.

I dedicate this thesis to my parents, Sean and Linda Marie.

Mom and dad, you have supported me throughout all of my adventures. Thank you for believing in me and encouraging me to pursue my dreams.

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Glossary of Terms

Food Literacy: Food literacy is defined as everyday skills that are associated with navigating a food system and the ability to ensure regular food intake is consistent with nutrition recommendations (Vigden & Gallegos, 2014). Food literacy competencies include food-related knowledge, skills, and behaviours (Truman et al., 2017).

Food Skills Education: Programs that educate individuals on how to plan, prepare, and consume healthy food (Begley & Gallegos, 2010). Schools have been identified as an ideal learning environment for such courses (Amin et al., 2018; Benn & Carlsson, 2014).

Gender: The state of being male or female in a cultural or societal context (Hyde, DeLamater, & Byers, 2012)

Optionalization: The process of making a course an optional area of study. It has been discovered that option courses often receive limited resources and teaching time compared to required courses. (Stitt, 1996)

Youth: In Canada, youth is typically defined as ages 12 – 17 years. For the purpose of this research project, the age group will be focused to those who are in grades eight or nine. This is due to food skills education courses generally being introduced in junior high schools in Alberta (University of Alberta School of Public Health, 2017).

CHAPTER 1: INTRODUCTION

"A culture whose people cannot cook is a much impoverished culture."

- *David Blunkett MP, Opposition Minister of Health in the United Kingdom, 1993*

Healthy eating is a pillar to maintaining good health throughout one's lifespan and preventing risk of obesity and diseases such as hypertension, cardiovascular disease, and diabetes, amongst others (World Health Organization (WHO), 2018; Agostini & Caroli, 2012; Agostoni & Pryzrembel, 2013; Stanhope, 2016; WHO, 2016). Healthy eating behaviours have also been positively associated with child growth and development (WHO, 2016). Therefore, healthy eating has been established in research as an essential life skill that individuals should be introduced to at a young age (Haines et al., 2019).

The significance of promoting healthy eating through food literacy specifically has begun to gain traction at a national level in Canada. This was showcased with the release of Canada's updated food guide and the current Minister of Health mandate letter (Government of Canada, 2019a; Government of Canada, 2019b). The updated food guide is historic as it approached healthy eating in a holistic manner (Government of Canada, 2019a). It recognizes healthy eating is more than simply 'what' individuals eat but also 'where', 'when', 'why', and 'how' (Government of Canada, 2019a). Specific recommendations that align with the revised, broader concept include; cooking more often, involving others in the planning and preparing of meals, and eating as a family (Government of Canada, 2019a). The development of such a comprehensive approach was partially initiated by research that uncovered how nutrition education alone had limited impact on healthy eating behaviours (Hayes-Conroy, 2013; Velardo, 2015).

A specific focus on promoting healthy eating among youth has risen to the forefront. In 2020, the Government of Canada released the updated Minster of Health mandate letter. The

Honourable Patty Hadju, Minister of Health, has been tasked with promoting healthy eating to youth through a number of initiatives, such as limitations on food marketing (Government of Canada, 2019b). Due to the release of both Canada's food guide and the Minister of Health mandate letter, it is clear that a key objective for public health is identifying initiatives that will improve youths' dietary practices (Ronto, Ball, Pendergast, & Harris, 2016). The recognition of healthy eating as a multifaceted concept was a positive step forward in addressing this public health goal.

Food Literacy

As the concept of promoting healthy eating has broadened, food literacy has emerged as an effective approach to improving population health outcomes (Howard, Edge, & Munro, 2013; Vidgen & Gallegos, 2014; Ronto et al., 2016; Vaitkeviciute, Ball, & Harris, 2015). Previous research has specifically uncovered that food literacy has particular success when incorporated into youth-focused interventions (Ronto et al., 2016; Vaitkeviciute, Ball, & Harris, 2015). Food literacy is a multi-dimensional concept that encompasses food-related knowledge, skills, and behaviours (Conference Board of Canada, 2013; Truman et al., 2017; Vidgen & Gallegos, 2014). Vidgen and Gallegos (2014) defined it further as "everyday practicalities associated with navigating a food system and using it to ensure regular food intake consistent with nutrition recommendations" (p. 50).

Innovative food literacy initiatives are increasingly being introduced in the school setting. In Australia, the high school curriculum identified foods skills education (FSE) courses as the ideal learning environment (Ronto et al., 2016). Allocating a specific course to educating students on food literacy allows a more comprehensive focus be incorporated (Ronto et al., 2016). On a smaller scale, food literacy was broadly included in the revised Ontario Family

Studies curriculum (Ontario Ministry of Education, 2013). FSE is a significant aspect of food literacy and as such was the targeted focus of this research project.

Food Skills Education

Food skills encompass the ability to plan, prepare, and consume healthy food (Begley & Gallegos, 2010). Recently, Canada has witnessed a decline of such knowledge and skills in the general population (Slater & Mudryj, 2016). This is a particular concern for Canadian youth due to the anticipated negative outcomes which includes the risk of obesity (Agostini & Caroli, 2012; Slater & Mudryj, 2016). It is important children develop food skills as they can positively influence developing attitudes, behaviours, and preferences (Caraher, Seeley, Wu, & Lloyd, 2013; Hersch, Perdue, Ambroz. & Boucher, 2014; Larson, Story, Eisenberg, & Newmark-Sztainer, 2006). Multiple researchers have found early experiences with food can enhance lifelong healthy eating behaviours (Lewallen, Hunt, Potts-Datema, Zaza, & Giles, 2015; Utter, Larson, Laska, Winkler, & Neumark-Sztainer, 2018). Conversely, research conducted by Thomas and Irwin (2011) highlighted more immediate benefits of youth involvement in meal preparation. Ultimately, these youth consume more fruits, vegetables, and other key nutrients while simultaneously having lower intakes of fat (Anderson, Bell, Adamson, & Moynihan, 2001; Aumann et al., 1999; Brown & Hermann, 2005; Larson et al., 2006; Thonney & Bisogni, 2006; Wrieden et al., 2007)

The financial benefits of FSE on an individual level should also be highlighted. Cooking at home has been identified as more financially sustainable, particularly when facing rising food costs (Thomas & Irwin, 2011; Gross et al., 2008; Miller & Branscum, 2012). In 2020, it is forecast that food prices will increase by two to four percent, with fruits, vegetables, and meat being the most impacted (Dalhousie University & University of Guelph, 2019). Therefore, it is a

concern that only a moderate level of Canadian youth are involved in household-food related activities (Slater & Mudryj, 2016).

Thesis Overview

This qualitative thesis aimed to explore the perceived value of FSE. It consisted of two research studies with similar purposes but distinct samples. The specific research questions and purpose are outlined below.

Study 1: "Is Learning to Cook Optional?"

Research question. What values do junior high students attribute to food skills education courses?

Research purpose. To uncover students' beliefs and experiences about food skills education's role in developing food literacy competencies and healthy eating practices.

Research objectives.

1) To explore how gender, perceived academic value, and exposure may impact perceptions and enrollment in food skills education courses.
2) To inform the development of future junior high food skills education curricula.

Study 2: "Food Skills; an Academic Course?"

Research question. What values do junior high principals and food skills education teachers attribute to food skills education?

Research purpose. The purpose of the research study was to explore food skills education's contribution to lifelong healthy eating behaviours, as well as barriers and facilitators to the effective implementation of school-based courses from the perspectives of junior high principals and food skills education teachers.

Research objectives.

1) To identify junior high principals' and food skills education teachers' understanding of food literacy.
2) To provide insight into the role of staff in promoting and supporting students' food literacy levels and healthy dietary behaviours.

As identified, the first study, "Is Learning to Cook Optional?" targets the perspective of grade eight and nine students. This age group was selected due to FSE courses primarily being introduced at the junior high level in Alberta. The second study, "Food Skills, an Academic Course?" interviewed both junior high principals and FSE teachers. Both studies implemented the same methodological approach. A focused ethnography approach was selected as the topic is culturally influenced through factors such as gender and ethnicity (Attar, 1990; Markow, Coveney, Booth, 2012). The selected data generating approach was semi-structured interviews with slight adaptations to the sample-based interview guides.

It was important to conduct the research project in the school setting for a number of reasons. First, in-school participant interviews aligned with a focused ethnography approach; one that is consistently conducted in the "field" (Fetterman, 1989). Second, it is a familiar environment which may have enhanced the participants' comfort (Alibali & Nathan, 2010). Third, the association between healthy eating and the school environment has emerged in previous research which determined that diet quality can influence academic outcomes such as literacy assessments and overall educational attainment (Langford et al., 2015; Florence, Ashbridge, & Veugelers, 2008). These factors led to the decision to conduct this research project within the school setting.

Thesis Rationale

This research project required a health promotion lens due to its alignment with health promotion competencies and social determinants of health. Health promotion competencies that coincided with this project included: partnership and collaboration; policy development and advocacy; and communication (Health Promotion Canada, 2015). These competencies, and their relationship to the project, will be further expanded on throughout the paper. This project was also directly impacted by certain social determinants of health such as: healthy behaviours; childhood experiences; gender; and education and literacy (Government of Canada, 2019c).

The determinant healthy behaviours was significant as healthy eating was an overarching focus of this project. As previously highlighted, healthy eating is an important life skill that should be introduced at a young age (Lewallen et al., 2015), thereby aligning with the determinant, childhood experiences. It was also anticipated gender may be significant due to the topic of FSE being historically gender laden. The final determinant, education and literacy was also important to consider, as the undertaking of this research project coincided with a historic provincial curriculum review.

As mentioned, the selection of the thesis topic was influenced by a number of timely factors. First, the Government of Alberta was in the midst of an extensive provincial curriculum update for kindergarten to grade nine when the research project began in 2017 (Alberta Education, 2016; Alberta Education, 2018a). A curriculum revision of this scale had not been conducted in decades (Alberta Education, 2018b). The revision aimed to address the concern that the applicability of course content was limited in modern day society (Alberta Education, 2018b). The curriculum update was a valuable opportunity given wellness education was a core pillar of the revision (Alberta Education, 2016). It was anticipated an argument could be made

for the creation of an FSE course curriculum. The curriculum review aligned with the health promotion competency of policy development and advocacy.

Student participants were specifically targeted due to the overwhelming evidence that their perspective remains a gap in the literature (Hall, Chai, & Albrecht, 2016; Perikkou, Kokkinou, Panagiotakos, & Yannakoulia, 2015). The teachers' perspectives were also crucial due to their limited representation on the provincial review panel (Alberta Teachers' Association, 2019). The current lack of school staff involvement is a result of the Alberta Government recently ending its partnership with Alberta Education (Alberta Teachers' Association, 2019). As highlighted earlier, the research project was also timely given the release of Canada's new food guide in January 2019 (Government of Canada, 2019a). Following its release, the research project slightly adapted to ensure findings and recommendations could be generalized beyond the municipal and provincial level. This included incorporating a question regarding awareness on the release of Canada's new food guide in all the interviews guides (Appendix G, Appendix H, Appendix I).

The two research studies are linked in that they both explore the perceived value of FSE. It was integral to separate the two distinct samples of school staff and students, due to the expectation that responses and priorities would differ. The initial literature review also highlighted the need to explore certain factors that only influenced some of the sample groups. For instance, budget was a significant barrier for school staff, whereas academic priorities were more influential for students. It was necessary to separate the samples to ensure their respective areas could be appropriately explored. This also allowed for the provision of in-depth insight from the most influential stakeholders when considering a primarily school-based topic (Fullan, 2016; Fullan & Miles, 1992; Kirk & Macdonald, 2001).

Thesis Outline and Summary

This thesis is made up of six chapters. Chapter 2 provides an in-depth review of the literature on healthy eating, food skills education, and the value of the participants' perspectives. Chapter 3 is a detailed review of the research studies' design and methodological approach. Chapter 4 will present Study 1: "Is Learning to Cook Optional?". This study outlines the findings that emerged from a sample of 10 junior high grade eight and nine students. Chapter 5 is Study 2: "Food Skills; an Academic Course?" which explored the perceived value of FSE amongst three junior high principals and three FSE teachers. The thesis will conclude with chapter 6 which will summarize the key findings of the research project, the strengths and limitations, and discuss potential implications.

CHAPTER 2: LITERATURE REVIEW

"Cooking is a life skill. Unless we teach our kids how to cook, any claim to be able to eat or live healthily is hollow." (Stitt, 1996, p. 33)

- *David Blunkett MP, Opposition Minister of Health in the United Kingdom, 1993*

This chapter presents an in-depth literature review on the role food skills education plays in healthy eating. To reiterate, this research project sought to explore the values students and school staff attribute to FSE. A total of 106 data sources such as peer-reviewed articles, government websites, and international reports were incorporated. Databases CINAHL Plus, PubMed, and MEDLINE were targeted for academic literature due to their relevant health focus. Keywords used in the search were: 'health behaviour', 'healthy eating', 'food literacy', 'food skills education', 'cooking', 'adolescent health', 'youth', 'teachers', 'principles', 'school-based', and 'curriculum'.

Overview of Healthy Eating, Food Literacy, and Food Skills Education

Healthy eating is essential to maintaining good health throughout the lifespan (WHO, 2018; Agostini & Caroli, 2012). Therefore, todays "nutrition transition" (Slater, Falkenberg, Rutherford, & Colatruglio, 2018, p. 547) from home-cooked meals to more ultra-processed foods is concerning. This shift has contributed to the finding that 62% of calories consumed in Canada come from ultra-processed foods (Monteiro, Moubarac, Cannon, Ng, & Popkin, 2013). In recent years, food literacy has emerged as an effective approach for promoting healthy eating, particularly for youth. As written by Vigden and Gallegos (2014), food literacy is "the scaffolding that empowers individuals, households, communities or nations to protect diet quality through change and support dietary resilience over time." (p. 55). A recent study conducted by Slater and colleagues (2018) identified three broad food literacy competencies for youth: relational competencies; systems competencies; and functional competencies.

Slater and colleagues (2018), discovered that the competencies, outlined in Figure 2-1, are required by youth to effectively transition to independent living.

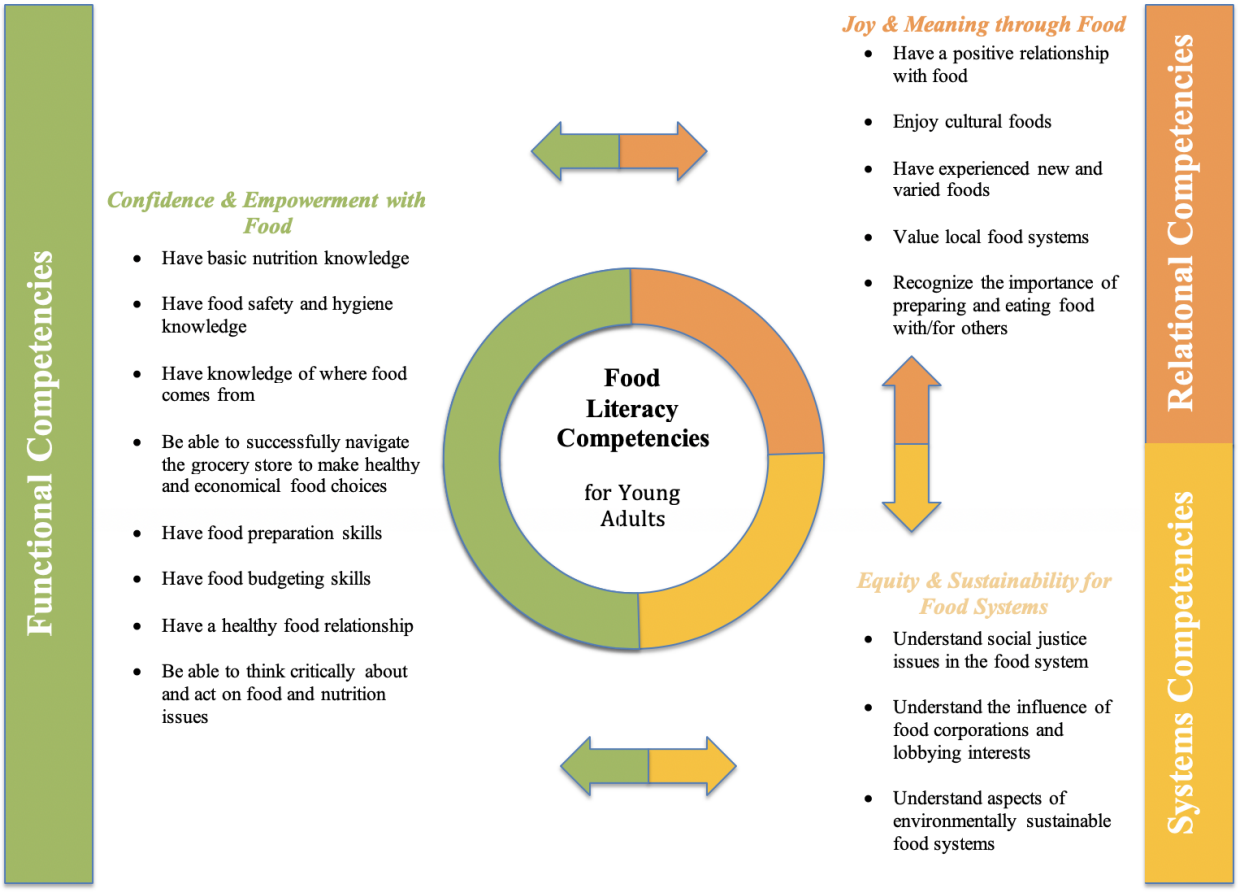

Figure 2-1: Food Literacy Competencies for Young Adults Identified by Slater and Colleagues (P. 552)

Relational competencies recognize the importance of joy and meaning through food. This competency directly highlights emotional and cultural relationships that are associated with food, which can contribute to one's identity (Moisio, Arnould, & Price, 2004). Systems competencies are the equity and sustainability of food systems, which have garnered particular significance in recent years (Slater et al., 2018). This competency identifies the growing influence of factors such as social justice and environmental issues (Lang, 2009; Palumbo, 2016). Functional competencies encompass confidence and empowerment with food. FSE, the focus of *Food for*

Thought, strongly aligned with the category of functional competency as both highlighted the need for further knowledge on food, nutrition, and food safety. In addition, Slater and colleagues (2018) suggests that guidance on food planning, budgeting, and preparation skills should be included in FSE course content due to decreased learning opportunities at home (Pendergast & Dewhurst, 2012).

As of 2016, approximately 63% of Canadian youth aged 12-17 years assisted with meal preparation; only 42% were able to cook by themselves (Slater & Mudryj, 2016). Research has linked the de-skilling of such food-related activities to a number of causal factors. First, Canadians' diets have shifted, now relying on foods that are more ultra-processed and convenient (Moubarac et al., 2013; Laska, Larson, Newmark-Sztainer, & Story, 2012; Pelletier & Laska, 2012). This is a concern as convenience foods are higher in caloric intake, have fewer nutritional qualities, and are more costly (Stitt, 1996; Vine & Elliott, 2014). Second, the increased number of women entering the labour market is a particularly significant contributor (Engler-Stringer, 2010; Bava, Jaeger, & Park, 2008; Caraher & Lang, 1999). Historically, the responsibility of teaching food skills to children was primarily placed on mothers (Markow et al., 2012). With fewer families preparing home cooked meals, children have limited opportunities to be introduced to food skills by parents or grandparents (Thomas & Irwin, 2011). As a result, schools have been identified as a key secondary setting for FSE (Orava, Manske, & Hanning, 2017).

School-based FSE Courses

Research has identified schools, community, and home as the settings that can either hinder or facilitate youth's dietary behaviours (Sallis, Johnson, Calfas, Caparosa, & Nichols, 1997; Elder et al., 2007). Youth currently have limited exposure to FSE at home (Thomas & Irwin, 2011). Therefore, organizations such as the WHO (1998) have called upon schools to

embrace the responsibility of enhancing youth's food-related knowledge and skills through the offering of select courses such as FSE. As stated by WHO (2006), "The (school) curriculum needs to cover several broad categories of nutrition, food and eating and pupils need to acquire life skills specific to healthy nutrition" (p. 1).

Literature has identified schools as a promising environment for teaching FSE for a number of reasons (Amin et al., 2018; Benn & Carlsson, 2014; Ovara et al., 2017). First, it is where youth spend an extensive amount of time which enhances the accessibility of health promotion programs (Fung et al., 2012; Story, Neumark-Sztainer, & French, 2002; Kealey, Peterson, Gaul, & Dinh, 2000). Second, healthy eating behaviours in youth have been shown to be positively associated with academic achievements, such as literacy assessments and overall educational attainment (Langford, Bonell, Jones, & Campbell, 2015; Florence, Ashbridge, & Veugelers, 2008). Third, FSE courses in schools provide an opportunity for social interconnectedness amongst peers (Thomas & Irwin, 2011). In Finland, the development of social skills in FSE courses is a prioritized outcome (Stitt, 1996). Previous research revealed that establishing relationships with peers can positively influence a student's adjustment to school and overall healthy development (Shin, Ryan, & North, 2019; Mouratidis & Sideridis, 2009). Finally, the incorporation of FSE courses can also help create supportive environments for promoting healthy eating through the implementation of diverse initiatives and policies (WHO, 2002; Snelling, Korba, & Burkey, 2007; Passmore & Harris, 2005). Additional school-based policy recommendations include the provision of healthy meals, healthy food options in vending machines, and restricting the use of unhealthy food options when fundraising, amongst others (WHO, 2006). Acknowledgement of all these related findings led to the school environment being selected for this research project.

Targeting the school setting helped establish the research project's participants: students, teachers, and principals. Their varying insights were significant as research has found the most effective school-based programs involve students and staff (Power, Bindler, Goetz, & Daratha, 2010). This is particularly relevant for the promotion of healthy eating, as it is well-documented how these stakeholders all play an integral role (Power et al., 2010).

Youth Focus

Healthy eating initiatives should target the youth population as eating patterns developed during childhood can influence long-term behaviours (Lewallen et al., 2015; Utter et al., 2018; Kelder, Perry, Klepp, & Lytle, 1994). This is in part, due to the establishment of identity and an enhanced sense of autonomy and independence during the adolescent years (Kelder et al., 1994). Additionally, work completed by Power and colleagues (2010) revealed that youth have a limited understanding of healthy eating beyond the initial recognition of the role of lifestyle factors in regard to overall health. When asked what constitutes healthy eating, a majority of youth primarily refer solely to fruits and vegetables (O'Dea, J. A., 2003; McKinley et al., 2005; Croll, Neumark-Sztainer, & Story, 2001). It is also interesting that as early as 2001, research uncovered how youth are inclined to support plant-based diets, as they consider meat an unhealthy food option (Croll et al., 2001). Furthermore, youth struggle to recognize the long-term consequences of unhealthy diets (O'Dea, 2003). More positive short-term outcomes such as energy level, athletic performance, and appearance are often prioritized (Cross et al., 2001). As a result, education surrounding healthy eating should pinpoint long-term impacts when directed to youth (Power et al., 2010).

Previous research, although limited, has documented that youth generally support healthy eating initiatives at school, including FSE courses (O'Dea, 2003; Thomas & Irwin, 2013).

Students believe that teachers can play an active role in encouraging, supporting, and enabling healthy eating (Stephens, McNaughton, Crawford, & Ball, 2015; Downs et al., 2012; O'Dea, 2003). Even so, while youth prefer healthy options, they still experience barriers to nutritious foods both at home and in school (Power et al., 2010). As a result, students have advocated for the implementation of school based FSE courses to strengthen their own healthy eating behaviours (Thomas & Irwin, 2013; Kainulainen, Benn, Fjellstrom, & Palojoki, 2012). At the high school level, some students believe FSE courses should be credited to help achieve provincial curriculum standards (Thomas & Irwin, 2013; Stephens et al., 2015). Course credit is only one of several reasons youth advocate for FSE in school curricula.

Youths' Perceived Benefits of FSE

Youth wish to develop a stronger aptitude in cooking to improve the health of not only themselves, but family members (Thomas & Irwin, 2013; Ronto, Ball, Pendergast, & Harris, 2017). Ronto and colleagues (2017) pointed out that perceived benefits of FSE often have a trickle-down impact on family. This may include family members preparing traditional cultural foods together which can enhance a sense of connectedness amongst family and the community at large (Thomas & Irwin, 2013). Similarly, as their confidence grows, youth are more likely to associate cooking with having fun thereby allowing them to replicate techniques with friends (Townsend et al., 2014; Amin et al., 2018; Thomas & Irwin, 2013).

The benefit of spending time with friends in association with FSE opportunities has begun to emerge in research (Fordyce-Voorham, 2011). It is well-documented that peers can influence youth's health behaviours, including healthy eating (Holund, 1990; Power et al., 2010; WHO, 2006). As further explained by Fordyce-Voorham (2011), "Friends and peers groups remain an important source of information and skill development through recipe exchanges and

communal food making" (p. 120). Therefore, the importance of peer involvement, acceptance, and promotion should be recognized to enhance students' participation in FSE courses (Cross et al., 2001). This approach would also align with youths' goal of participating in activities within an enjoyable atmosphere (Fordyce-Voorham, 2011).

Youth also have a desire to engage in FSE courses due to the anticipated outcome of further developing independence and self-efficacy (Thomas & Irwin, 2013; Amin et al., 2018). A recent study conducted by Amin and colleagues (2018) narrowed in on the specific goal of preparing for adulthood. Many students recognize the need to learn how to cook before they leave home (Amin et al., 2018). Significantly, Study 1: "Is Learning to Cook Optional?" yielded the same finding. FSE teachers can support the development of independence by incorporating individual activities when feasible (Fordyce-Voorham, 2011). This becomes essential when parents continue to restrict youth's exposure to certain food related tasks, ultimately hindering their developing independence. Nonetheless, safety concerns are only one factor that has been found to limit youth's participation in FSE. Further barriers to FSE opportunities will now be identified.

Perceived Barriers to FSE

Significant barriers that prevent youth from enrolling in FSE courses include a lack of time and confidence (Croll et al., 2001; Lang & Caraher, 2001). Research conducted by Short (2006) found that reduced confidence in one's cooking skills can directly impact food choices and preparation methods with a higher potential for unhealthy options being selected. Providing hands-on learning opportunities to effectively overcome this barrier can increase the number of youth who incorporate healthy eating behaviours into their lifestyle (Thomas & Irwin, 2013; Cross et al., 2001).

Another barrier that has begun to emerge in the literature is gender (Pendergast, Garvis, & Kanasa, 2013; Ronto et al., 2017). FSE courses were originally developed to prepare women for marriage (Markow et al., 2012). Given this, parents may be hesitant to enroll their daughters in FSE courses believing it may damage their modern identity (Pendergast, Garvis, & Kanasa, 2013; Ronto et al., 2017). Some FSE teachers referenced in a novel by Attar (1990) "their plight with reference to sexism – their subject was not valued because it was to do with the home and with women's work" (p. 11). Further effort may be required to ensure FSE courses have adapted to become gender-bias free (Attar, 1990). As stated by Attar (1990), "Home economics teachers were fighting a feminist campaign…working hard to change its (FSE courses) image and content, ridding it of stereotyping and bias of all kinds" (p. 1).

As previously identified, parents can also prevent youth from being exposed to FSE (Amin et al., 2018). As expanded on by Fordyce-Voorham (2011), "parents need to take responsibility in allowing their children to build up their food experiences" (p. 120). Research conducted by Slater and Mudryj (2016) found that parents may restrict children's participation in food preparation due to age or perceived lack of skills. The growing influence of this parental barrier was highlighted when only five, from a sample of 31, children aged 9-12 years were able to use heated appliances such as ovens or stoves (Amin et al., 2018). Some children were completely prohibited from performing tasks such as preheating the oven, turning on the stove, or removing food from the oven (Amin et al., 2018). Due to this, previous research found FSE teachers believe safety education should include a specific focus on burn prevention (Fordyce-Voorham, 2011) and occur before students participate in any cooking modules (Nannayakkara, Margerison, & Worsley, 2018). FSE teachers can play an integral role in helping youth overcome barriers to FSE opportunities (Crawford & Worsley, 2005).

Teachers

FSE teachers are primarily responsible for the success of FSE courses as their responsibilities include, but are not limited to: developing lesson plans; selecting classroom activities; and evaluating students (Gussow & Contento, 1984; Altinyelken, 2010; Fullan & Pomfret, 1977; Guskey, 1988). Previous research has found that teachers support a more hands-on approach to FSE courses (Slater, 2013; Benn & Carlsson, 2014; Colatruglio & Slater, 2014). Literature has documented how youth learn better if FSE is taught through practical components as opposed to theoretical concepts (Ronto et al., 2016b). Incorporating hands-on activities also gives teachers the freedom to implement more innovative and social activities. This can include simulating popular cooking shows youth have seen on television, a popular assignment referenced in Study 1: "Is Learning to Cook Optional?" (Fordyce-Voorham, 2011).

Teachers are also crucial stakeholders when exploring curriculum development and implementation due to their in-depth insight on students, school administration, and available resources (Kirk & MacDonald, 2001). Research has also discovered that the implementation of new or revived curriculums will be limited in effect without teacher involvement from the onset (Fullan, 2016; Fullan & Miles, 1992; Kirk & Macdonald, 2001). Successful implementation is strongly associated with a teacher's perspective on curriculum content, teaching materials, and professional development opportunities (Altinyelken, 2010; Bantwini, 2010; Perez-Rodrigo & Aranceta, 2003; Ronto et al., 2016b). A study conducted by Amin and colleagues (2018) had similar findings in that teachers' perspectives of lesson plans can strengthen or hinder future efforts to promote food literacy in schools. A culmination of all this research identified the clear need to include teachers as participants in this research project. Another stakeholder that garnered mention in previous research was principals.

Principals

The perspectives of principals on FSE opportunities is also absent in current literature. Nonetheless, there is consensus that principals are important champions of change (MacLellan, Taylor, & Freeze, 2009). They are prominent school leaders and as such can be key policy enablers when implementing healthy eating initiatives (Evans, 1996). Principals also act as the gatekeeper between teaching staff and external relations, such as school boards and the general public (McKenna, 2003). Therefore, the principal's interest and support are essential to ensure healthy eating policies are effectively implemented (MacLellan et al., 2009). A principal's role as a champion for change can also help overcome barriers schools face in the creation of not only a healthy eating environment, but the sustainability of FSE courses (MacLellan et al., 2009). Significant barriers that were identified include: budget restrictions; lack of knowledge and skills; and a growing academic focus.

Budget

Both teachers and principals have acknowledged inadequate funding as a primary barrier to the implementation of FSE courses (Ronto et al., 2016). Previous research has found that FSE teachers often reduce the amount of hands-on assignments when a budget is insufficient (Ronto et al., 2016). As identified earlier in the literature review, this can impede the students' quality of learning due to the necessary incorporation of more theoretical assignments (Ronto et al., 2016).

Schools are also apprehensive about the rising cost of healthy food products (MacLellan et al., 2009). A study conducted by MacLellan and colleagues (2009) identified how FSE teachers were unable to purchase healthy food options for cooking modules due to budget restrictions. Teachers anticipate this barrier will continue to gain significance given students' desire to learn about vegetarian and vegan options (Fordyce-Voorham, 2011). This is also a

concern as research has identified effective FSE courses teach a variety of cooking methods to allow autonomy in selecting dishes that meet health, dietary, and budgetary demands (Fordyce-Voorham, 2011).

Another budgetary barrier that emerged in previous research was maintenance of the physical facility (Ronto et al., 2017). This barrier was uncovered when teachers spoke about the inability to complete necessary renovations in their kitchen space (Ronto et al., 2017). Finally, budget limitations can impede the quality of the course due to the employment of an insufficient number of teachers or kitchen assistants (Ronto et al., 2016). This may directly restrict the number of students who can participate in the course (Ronto et al., 2016). Hiring considerations can also be impacted, as unlike core course teachers, FSE teachers do not currently require skill-based qualifications (Ronto et al., 2016). Therefore, individuals who lack a background in FSE can be selected to lead the class (Ronto et al., 2017). That particular barrier will be expanded on in the following section.

Lack of Knowledge and Skills

It has become more common for FSE teachers to be chosen based on personal interest rather than professional certifications (Ronto et al., 2016b). Justification for this approach is that the closure of tertiary programs specializing in FSE has led to a lack of qualified teachers (Colatruglio & Slater, 2014). Schools may also try to address a number of roles and responsibilities within one teaching position due to budget constraints (MacLellan et al., 2009; Waggie, Gordon, & Brijlal, 2004).

FSE teachers with an insufficient knowledge background can be supported and improved through professional development opportunities (Downs et al., 2012). Therefore, it is a concern that training resources and materials for FSE remain limited (Nanayakkara et al., 2018). Current

materials have been identified by FSE teachers as outdated and inaccessible (Ronto et al., 2016a; Slater, 2013). Effort should be made to promote the sharing of information through different mechanisms, such as online or professional networks (Ronto et al., 2016a; Nanayakkara et al., 2018). Previous research conducted by Little (1990) termed this community network approach as a subject discipline collaborative. It directly benefits teachers with the sharing of resources but can also help alleviate the sense of isolation (Little, 1990). FSE teachers may experience enhanced isolation from fellow staff as value is increasingly being allocated to core subjects.

Academic Focus

The final barrier that was referenced in previous research was the growing prioritisation of academics. FSE courses are undervalued when compared to core courses such as math, English, or science (Ronto et al., 2016; Ronto et al., 2017). It has been found that this can lead to an unequitable distribution of educational time and resources (Ronto et al., 2016; Lichenstein & Ludwig, 2010; Slater, 2013). As referenced by Stitt (1996), this gap has only widened with the 'optionalization' of FSE courses. When courses are no longer mandatory, there may be an immediate reduction of time allocated to the subject (Stitt, 1996). This can lead to students learning primarily theoretical concepts of topics, such as food literacy through other courses (Slater, 2013; Colatruglio & Slater, 2014; Hawkes et al., 2015). The practical component, which has been found to be crucial in the successful sharing of food skills, is often lost (Ronto et al., 2016).

An additional outcome of prioritizing academics is parents may actively prevent students from taking an FSE course (Ronto et al., 2017). This is due to the parental belief that core courses, such as math or science, can contribute more to future work placements (Lichtenstein & Ludwig, 2010; Slater, 2013). As stated by an FSE teacher in a study conducted by Slater (2013),

an academic focus is promoted to students as keeping future options “much more open.” (p. 620). Conversely, FSE courses can actually provide students information on nutrition and food related careers and potential educational pathways thereby increasing exposure to a greater range of job options (Nanayakkara et al., 2018). The perspective of students on the significance of this barrier was a gap that required further research (Hall et al., 2016; Perikkou et al., 2015).

A growing number of teachers, principals, and parents are beginning to devalue FSE (Ronto et al., 2017). One FSE teacher shared how a fellow staff member described their course as “cooking, home science, old fashioned, and not really important.” (Ronto et al., 2016, p. 24). Teachers believe that the negative attitude towards FSE courses are due to a lack of understanding on course content (Ronto et al., 2017). This can have a trickle-down effect, as Downs and colleagues (2012) found that 22% of school administrators (n=21/95) acknowledged parents’ resistance was a barrier to implementing a range of healthy eating initiatives to students, including FSE courses. Efforts should be made to showcase the broader scope of FSE course curricula with the incorporation of a food literacy approach (Ronto et al., 2017). Current FSE courses curricula in Alberta will now be explored in greater detail.

FSE Course Curricula in Alberta

An ideal FSE course would aim to teach youth about food safety, meal preparation techniques, and how to maintain a balanced diet (Benn & Carlsson, 2014). Currently in Alberta, a curriculum for FSE does not exist at the junior high level. It was anticipated this may change with the launch of Alberta Education’s most recent curriculum update in 2016 (Government of Alberta, 2016). Wellness education was to be a key subject area targeted in the update (Alberta Education, 2016). The concrete vision of the wellness education has not yet been formally established.

The curriculum update was also to be based on the pillars of eight competencies outlined in Table 2-1 (Alberta Education, 2016).

Table 2-1

Curriculum Competencies Identified by Alberta Education

Curriculum Competencies	
Critical Thinking	Communication
Problem Solving	Collaboration
Managing Information	Cultural and Global Citizenship
Creativity and Innovation	Personal Growth and Well-being

Competencies are defined as "interrelated sets of attitudes, skills and knowledge that are drawn upon and applied to a particular context for successful learning and living" (Alberta Education, 2016, p. 15) As of January 2020, the provincial curriculum update remains under review.

This literature review provided in-depth insight on the area of FSE. It also identified previous research that explored the student, teacher, and principal perspectives on similar topics. This information helped justify the research participants and provided a foundation for questions that were included in the interview guides. Chapter 3 will explore methods in more depth. Chapter 4 consists of Study 1: "Is Learning to Cook Optional?" which investigated the youth perspective. Chapter 5 will outline the findings from Study 2: "Food Skills, an Academic Course?" which explored the insight of school staff.

CHAPTER 3: STUDY DESIGN AND METHODOLOGICAL APPROACH

"Skills for living translates as a form of superior common sense, but the world of home economics is not a common-sense world. It has its own rules and restrictions."

- *Dena Attar, 1990, p. 14*

This chapter will outline the selected research design for this research project. The same research method, data generating strategy, and data analysis approach were used for both studies. First, the conceptual framework will be explored. Second, the research method will be identified and expanded on. Third, the respective samples and participant recruitment strategies will be described. Fourth, the implemented data generating approach will be outlined followed by a detailed description of the selected data analysis approach. The ethical considerations will then be highlighted and the chapter will conclude with a reflection on rigour.

Conceptual Framework

The conceptual framework for the research project is outlined in Table 3-1. As highlighted, a relativist ontology, subjectivist epistemology, and constructivist theoretical perspective were selected.

Table 3-1

Conceptual Framework for Research Project, Food for Thought

	Ontology	Epistemology	Theoretical Position
Selected Approach	Relativist	Subjectivist	Constructivist
Description	Recognition there are multiple realities	Co-creation of knowledge through dialogue between the researcher and participant	Recognition that an individual's realities are historically, socially, and culturally constructed.

A relativist ontology recognizes that there are multiple realities and truths (Mayan, 2009). Qualitative research embraces the idea of multiple realities which are made evident through participants' differing perspectives and experiences (Creswell, 2013). The role of epistemology is to capture subjective views to establish the participants' collective truth (Creswell, 2013). A subjectivist epistemology was chosen as it allowed the truth to be co-created through dialogue between the researcher and participant. The research paradigm was completed with the incorporation of a constructivist perspective. This theoretical position recognizes that an individual's realities are historically, socially, and culturally constructed (Mayan, 2009). This was critical for the research project given FSE courses are presently, and were historically, culturally laden (Attar, 1990; Markow et al., 2012). For the purpose of this research project, culture was defined as an abstract concept that influences an individual's beliefs, values, and behaviours (Mayan, 2009; Richards & Morse, 2007). The selected research method was focused ethnography.

Research Method

A research method is defined as "a collection of research strategies and techniques based on theoretical assumptions that combine to form a particular approach to data and mode of analysis" (Mayan, 2009, p. 31). Focused ethnography is a form of ethnography being incorporated into a growing number of research studies (Knoblauch, 2005). It is gaining popularity, particularly in health research, when participants consist of a specific sub-culture in modern day society (Rashid, Hodgson, & Luig, 2019; O'Mahony, Donnelly, Este, & Bouchal, 2012; Gagnon, Carnevale, Mehta, Rousseau, & Stewart, 2013). Characteristics of this method will now be explored to identify its suitability for the research project.

Focused ethnography is a time-limited, targeted form of ethnography that explores a specific research question identified at the onset of the project (Gagnon et al., 2013; Mayan, 2009). It has emerged as a prominent research method approach when long-term fieldwork is not considered feasible (Rashid et al., 2019). For this project, short-term fieldwork was more realistic given a master's thesis timeline. It was also appropriate as the data was generated in the school setting, which faced its own time constraints. Reduced time requirements were essential as the St. Albert Public School Board district stated that "requesting a significant amount of time from teachers, administrators and students…(are) reason for denial" (C. Coyne, personal communication, May 15, 2019).

Since its initial development, focused ethnographies have been conducted with smaller groups of people within a particular societal context (Knoblauch, 2005; Festinger, Ricken, & Schachter, 1956; Mayan, 2009). Studies that use this research method strive to answer the 'why' and 'how' questions which can centre on workplace and education culture (Cleland, 2017; Rashid et al., 2019). It differs from a traditional ethnography in that a sole issue is explored in its everyday context (Roper & Shapira, 2000; Muecke, 1994). At the conclusion of the project, it is the role of the researcher to share the perspectives of participants in an effort to "invoke a call to action and attempt to use knowledge for social change" (O'Mahony & Donnelly, 2012, p. 736). For the purpose of this project, it was anticipated this may include advocating for the development of a FSE course curriculum. The complete research design approach has been outlined in Figure 3-1.

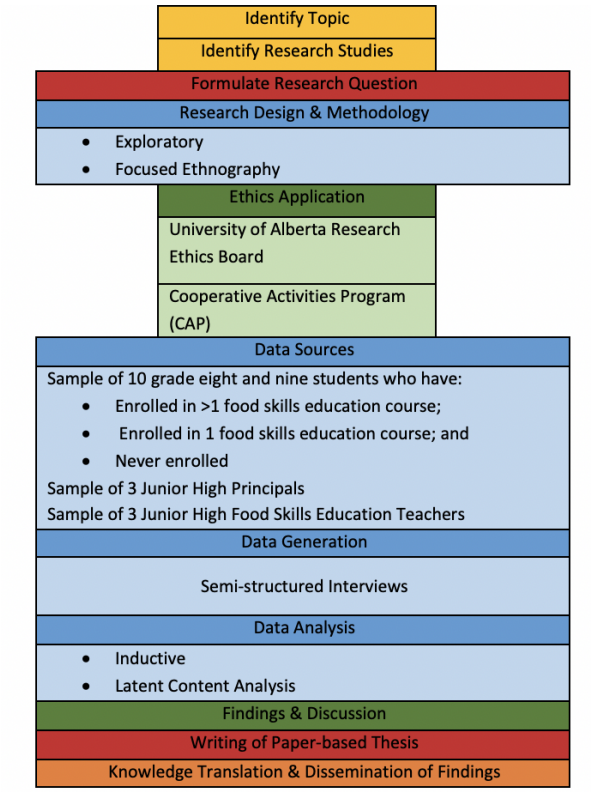

Figure 3-1: Research Design

A final key aspect of focused ethnography is building relationships with leaders of a population group before data are generated (Rashid et al., 2019). The purpose of a focused ethnography is to understand people which "requires relationships; [and] building relationships takes time". (Rashid et al., 2019, p. 2). Conducting informal interactions before the research design and ethics application is submitted, ensures a relevant and useful project is developed (Rashid et al., 2019). Further, these conversations allow the researcher to become familiar with the population and provide an opportunity for "exploration, reflectivity, creativity, mutual exchange and interaction" (Caine, Davison, & Stewart, 2009, p. 489). Partnership involvement should be maintained throughout all stages of the research project (Rashid et al., 2019). As stated by Smith (2009), these relationships are a form of stakeholder engagement and can lead to

specific gaps being identified, selection of appropriate research questions, and recruitment of potential participants.

For the purpose of this research project, a trusting relationship was established with the junior high principal of a participating school. The principal taught the researcher, and subsequently became principal, during their time in the St. Albert Public School Board district. This approach subsequently aligned with the health promotion competency of partnership and collaboration (Health Promotion Canada, 2015). This competency outlines the importance of establishing and maintaining linkages with community leaders to stimulate collaboration (Health Promotion Canada, 2015). The partnership with the principal was maintained throughout all stages of the project and contributed to the development of the research design, addressed certain gaps, and acted as a gatekeeper. Through their role as gatekeeper, the principal became instrumental in recruiting knowledgeable participants and scheduling interviews.

Study 1: "Is Learning to Cook Optional?"

Youth Participant Sample

Convenience sampling was used to select the participating school (Richards & Morse, 2007) as FSE courses are only offered in four junior high schools within the St. Albert Public School Board district (n.d.). Purposeful sampling was used to select the youth participants. Purposeful sampling is commonly used with focused ethnography (Higgenbottom Pillay, & Boadu, 2013) as it allows the researcher to select participants who can effectively communicate personal experience with the phenomenon (Mayan, 2009). For this particular research study, the phenomenon was junior high students' perceived value of FSE.

A total of 10 students participated in an interview with eight identifying as female and two identifying as male. Further participant demographics, such as grade and previous

participation in FSE courses, are outlined in Appendix A. All of the youth participants were enrolled at the same junior high school in the St. Albert Public School Board district. All of the student participants came from the same school due to time restrictions for participant recruitment and subsequent data generation. Ethical approval was confirmed by the school board district on June 13, 2019. As such, the gatekeeper was the sole principal willing to allow research to be conducted in the school setting before classes were dismissed for the end of the year. To ensure all aspects of the research focus were incorporated, the youth participants were divided into three groups, those that have: enrolled in more than one term of FSE; enrolled in one semester and not returned; and never enrolled. By doing so, the study sought to uncover both negative and positive insights which highlighted aspects of the phenomenon that were initially unnoticeable (Mayan, 2009). The youth participants were recruited though the use of a gatekeeper. The principal filled this role as he had a pre-existing, trusting relationship with the participants.

Youth Participant Recruitment

Youth participant recruitment occurred in June 2019. The youth participants consisted of grade eight and nine students to ensure they had been presented with an opportunity to enroll in a FSE course. Active consent was required from a parent or guardian as the youth participants were under the age of 18 years (Appendix B) (Richards & Morse, 2007). The primary youth participant recruitment strategy was targeted to the parents or guardians. First, the principal, who acted as a gatekeeper, e-mailed the parents or guardians of potential participants. The researcher was CC'd on the e-mail which had attached an electronic copy of the consent form. Sharing the consent form electronically provided anyone with visual impairments the opportunity to review using a computer software program.

At this time, parents or guardians were able to contact the researcher or thesis supervisor by e-mail to receive further information about the study. Signed consent forms were returned by e-mail or hard copy. Active assent was confirmed from the youth participants upon receiving a signed consent form from the parent or guardians. Participation was explored through the in-person review of an informed assent form between the researcher and youth (Richards & Morse, 2007). Participation was confirmed upon the youth signing the assent form (Appendix C).

Study 2: "Food Skills; an Academic Course?"

Principal and Teacher Participant Sample

This sample consisted of three junior high principals and three FSE teachers. Further demographic information such as gender and length of time in the profession is provided in Appendix D. Convenience sampling was used to select the participating schools and participants due to a limited number of FSE courses being offered in the St. Albert Public School Board district (n.d.). A pilot interview was conducted with an FSE teacher in June 2019 with the generated data being included in the analysis. This approach was consistent with previous studies of a similar focus (Ronto et al., 2016b). For this particular research study, the phenomenon was exploring what values junior high principals and FSE teachers attribute to FSE.

Principal and Teacher Participant Recruitment

Participant recruitment for the junior high principals and FSE teachers occurred in June 2019. The first step of participant recruitment was through the Cooperate Activities Program (CAP) application. Upon approval, the St. Albert Public School Board provided the names and contact information for eligible participants. The researcher then contacted all of the potential participants by e-mail and shared a brief introduction to the research study and additional contact information. Upon expressing initial interest, the study's information sheet and consent form

was provided electronically (Appendix E, Appendix F)(Ronto et al., 2016b). The researcher ensured potential participants had an opportunity to ask any questions by telephone or in person. The signed consent forms were returned by e-mail or in hard copy.

The gatekeeper in Study 1: "Is Learning to Cook Optional?" also supported this research study by helping recruit other principals. This was done through contacting peers by e-mail and sharing further information on the research study. The use of a gatekeeper helped recruit a sufficient number of participants as the initial response was limited.

Data Generating Approach

The selected data generating approach was semi-structured interviews which are commonly done in conjunction with focused ethnography (Mayan, 2009; Rashid et al., 2019). Semi-structured interviews are conducted when sufficient information on the phenomenon is available in the literature, but participant responses cannot be predicted (Richards & Morse, 2007). As such, semi-structured interviews were an appropriate strategy as they supported the exploratory nature of the topic.

The student interviews took place in the familiar school setting (Mayan, 2009). This allowed the researcher to "provide and promote an atmosphere where participants share their thoughts and feelings freely" (Rashid et al., 2019, p. 5). The school environment also aligned with a focused ethnography approach as interviews are generally completed in the 'field' (Creswell, 2013; Fetterman, 1989). The student interviews were organized by the principal so as not to conflict with scheduled exams. The interviews ranged in length from 20 to 30 minutes and were completed in June 2019.

In regard to school staff, four interviews were conducted in a school, one was by phone, and one occurred on a university campus. Participants were able to choose their preferred

location and approach to help alleviate scheduling conflicts (Rashid et al., 2019). Interviews with school staff were approximately 40 to 60 minutes in length. These interviews were also completed in June 2019.

Three interview guides were created for the respective samples due to anticipated differing focuses and priorities (Appendix G, Appendix H, Appendix I). Primary differences included school staff reflecting on factors such as budget considerations and their perceived role in promoting healthy eating. In comparison, the student interview guide incorporated questions on barriers and facilitators to enrollment in FSE courses. All of the questions were open-ended and non-judgemental (Rashid et al., 2019). The researcher also incorporated a variety of probes to ensure detailed insight was provided through high-quality data.

At the conclusion of each interview, the researcher recorded voice memos of two to four minutes which identified interesting responses and emerging commonalities. Memoing is the process of outlining preliminary analytical notes about the data (Mayan, 2009; Birks, Chapman, & Francis, 2008). The memo process was structured in that three questions were reflected on for each interview: what was unique, was a gender impact referenced, and what was similar. These memos were frequently referred to during the data analysis stage when establishing categories and sub-categories.

Data Analysis

All 10 of the student interviews were transcribed verbatim by the researcher. This allowed the researcher to familiarize herself with the data and begin to identify certain consistencies and unique ideas (Tracy, 2013). Due to time constraints, the principal and teacher interviews were transcribed by an external source. To ensure confidentiality, the data were anonymized before being shared with the transcriber through Dropbox. The student interviews

were analyzed first in October 2019. The analysis of the principal and teacher interviews followed in December 2019. A data software program was not used to analyze the data.

Latent content analysis was the implemented analytical technique. This is an analytical approach generally done in conjunction with focused ethnography (Mayan, 2009; Richards & Morse, 2007). Primary patterns within the data were identified, coded, categorized and themed (Mayan, 2009). Data analysis was inductive to align with the qualitative approach (Mayan, 2009). The latent content analysis followed the cyclic process outlined by Mayan (2009) which will now be described in further detail.

The first step of data analysis for both research studies was reading through the interview transcript in its entirety. In the second read, the researcher would underline certain comments or words that were striking. Comments were made in the margin if certain responses were unique or similar to other interviews. During the third read, all of the data was coded and placed into respective categories. Primary categories for the individual transcript were established in respective word document tables which outlined: key quotes, respective participants, and emerging sub-categories. Emerging sub-categories were colour-coded which remained consistent throughout the data analysis process. A colour-coding approach was implemented to allow for a visual representation of identified patterns. An example of a data analysis table is provided in Appendix J. Once an entire transcript had been coded, key thoughts were summarized in a word document for each category.

Once the transcripts had been coded individually, the tables were printed and manually cut with scissors. All of the similar categories were combined in 12 separate files. At this time, sub-categories were further developed and a visual diagram was created to clearly identify the concluding findings (Mayan, 2009). The researcher then wrote a summary of each category and

sub-category which was shared with the thesis supervisor for review (Mayan, 2009). The word document outlining the summary of a sub-category for Study 1: “Is Learning to Cook Optional?” is provided in Appendix K. These summaries provided a foundation for the written result sections of both research studies.

Ethical Considerations

Ethical approval was sought from the Research Ethics Board at the University of Alberta. A full committee review was required as youth are considered a vulnerable population (Government of Canada, 2014). Application Pro00085426 was submitted to the Research Ethics Board on February 17, 2019 and approval was received on March 11, 2019. Ethical approval was also required through the Cooperate Activities Program (CAP) application as the research was conducted in schools located in the St. Albert Public School Board district (University of Alberta, 2018). This application was submitted to the Faculty of Education on March 12, 2019 and was approved by the school district on June 13, 2019.

As described earlier, participants were informed on the right to refuse to answer any questions when reviewing the consent and assent forms (Richards & Morse, 2007). The students had the right to choose to not participate even if consent was received from their parent or guardian. Participants remained anonymous throughout the data analysis process and in the completed thesis (Richards & Morse, 2007). Further, the participants were able to withdraw from the research project at any time (Richards & Morse, 2007) up until their data had been transcribed and analyzed. No known physical risks existed from participating in this research project. Emotional risks were perceived as minimal, but youth participant responses did focus on potential emotional triggers such as gender, family, and school dynamics. Emotional triggers

were carefully considered when selecting the terminology for questions and probes included in the interview guides.

Data were stored in a locked drawer for the duration of the research process to ensure confidentiality. A second copy of the data was stored on a password protected hard drive. Sensitive data will be destroyed five years after publication of the thesis. Data of a non-sensitive nature will be retained indefinitely. The researcher had completed the Tri-Council Policy Statement course on conducting research with human participants and the School of Public Health Ethics Workshop. The core lessons of respect and professionalism were drawn on throughout the research process.

Rigour

The rigour of this research project was drawn from the concept of trustworthiness as identified by Lincoln and Guba (1985). The four criteria identified by Lincoln and Guba (1985) in establishing trustworthiness of the data include credibility, transferability, dependability, and confirmability. These four criteria were all considered with the incorporation of select verification strategies.

This research project integrated five verification strategies as described by Morse and colleagues (2002). First, researcher responsiveness was met as the primary researcher kept a reflective journal in a word document (Mayan, 2009). This reflexive strategy may increase the confirmability of the research findings (Lincoln & Guba, 1985). An audit trail of decisions and thoughts throughout the research process was documented (Mayan, 2009). This may increase the dependability of the study as decisions can be reviewed at the completion of the research project (Lincoln & Guba, 1985). Second, methodological coherence was achieved through consultation

with the thesis supervisor and research committee (Mayan, 2009). The methodological approach and research design was outlined upon reaching consensus. The participant samples also had representation of both positive and negative insight into the research interest (Mayan, 2009). In addition, only members who could sufficiently speak to the phenomenon participated in the research project (Mayan, 2009). This enabled a rich and in-depth description of the research focus to be developed (Mayan, 2009) thereby increasing the transferability of the findings (Lincoln & Guba, 1985).

CHAPTER 4: STUDY 1 – IS LEARNING TO COOK OPTIONAL?

Introduction

It's time to ask the question: is learning to cook optional? The current food environment in Canada is failing to deliver and promote nutritious diets (Vanderlee, 2017). Critical social environments such as schools are struggling to support healthy eating, specifically among youth (Orava, Manske, & Hanning, 2017). This is concerning as healthy eating is positively associated with child growth and development, as well as prevention of chronic diseases such as obesity and type 2-diabetes (World Health Organization (WHO), 2016). Food literacy can be key in thwarting such outcomes (Markow, Coveney, & Booth, 2012; Boucher, Manafo, Boddy, Roblin, & Truscott, 2017). Food literacy is defined as concepts focusing on nutrition knowledge, food preparation or cooking skills, and consumption of healthy food options (Truman et al., 2017). Food literacy programs are generally offered in the school environment (Truman et al., 2017). This research study aimed to promote healthy eating with a particular focus on curriculum development which was identified as a national priority by Vine and colleagues (2014). It's additionally timely with the release of Canada's new food guide in January 2019.

Canada's Food Guide

The release of Canada's updated food guide showcased the federal government's growing recognition on the value of food literacy. The food guide defines healthy eating as more than the foods people eat. It is now a broad concept that encompasses 'where', 'when', 'why', and 'how' people eat. For the purpose of this research study, we targeted the 'where' and 'how'. A main recommendation of the food guide is to cook more often and involve others in "planning and preparing meals" (Government of Canada, 2019, p. 1). This incorporation is critical when

considering the impact of food literacy on youth. The component of food literacy pinpointed by this research study was food skills education (FSE).

As Begley and Gallegos (2010) have noted, over the past few decades, Canadians have begun to lose recognition of the importance of food skills; the purchasing and preparing of food. This has led to a reduced number of individuals who are confident in their cooking skills (Murray et al., 2016). Slater (2013) argued this decline occurred in correlation with a regression of children's exposure to FSE at home and in school. This is a concern as early experiences with food can positively impact children's attitudes, behaviours, and preferences (Caraher, Seeley, Wu, & Lloyd, 2013; Hersch, Purdue, Ambroz, & Boucher, 2014; Larson, Story, Eisenberg, & Newmark-Sztainer, 2006). In addition, teaching young children about nutrition and food skills can enhance lifelong healthy eating behaviours (Lewallen, Hunt, Potts-Datema, Zaza, & Giles, 2015; Utter, Larson, Laska, Winkler, & Neumark-Sztainer, 2018). FSE has been identified as a key policy response in promoting healthy eating (Markow et al., 2012). As exclaimed by Shapiro (2004) "Home cooking these days has far more than sentimental value; it's a survival skill" (p. 252-3).

School-based Public Health Approach

An ideal environment for teaching FSE is school (Ovara et al., 2017) due to it being where children and youth spend a large amount of time (Fung et al., 2012; Story, Neumark-Sztainer, & French, 2002). The benefits of FSE also aligns with a school's priority of academic achievement (Langford, Bonell, Jones, & Campbell, 2015) as diet quality is associated with enhanced academic performance (Florence, Ashbridge, & Veugelers, 2008).

In Alberta, it is a public health concern (University of Alberta School of Public Health, 2017) that FSE in junior high, grades seven to nine, is currently optional (Alberta Education,

2017). Children who do not enroll in FSE courses rely more on convenience foods which have fewer nutritional qualities and are higher in price (Stitt, 1996; Vine & Elliott, 2014). The perspectives youth have on FSE courses and their perceived value is a current gap in the literature. Ronto and colleagues (2016) showed how youth are interested in learning about food and nutrition, particularly cooking. For the purpose of this research study, youth were defined as grade eight and nine students. That being said, it must be considered; does the decision to enroll in a FSE course solely reside with youth?

Parental Influence

Literature suggests that parents do not see value in FSE courses (Lichtenstein & Ludwig, 2010; Ronto, Ball, Pendergast, & Harris, 2017; Slater, 2013). Core courses such as math and science are considered more important as they contribute to future career choices (Lichtenstein & Ludwig, 2010; Slater, 2013). Parents even advise students to not enroll in FSE classes in lieu of more academic courses (Slater, 2013). The intent is that this will help students keep future options "much more open" (Slater, 2013, p. 620). Further research was required to see if the prioritization of core subjects acts as a barrier to FSE course enrollments (Hall, Chai, & Albrecht, 2016; Perikkou, Kokkinou, Panagiotakos, & Yannakoulia, 2015). The devaluing of FSE courses stems from a range of factors including, but not limited to, exposure to cooking at home and gender-based influences.

Impact of Gender

Currently, Canada is facing a generation of parents who do not know how to cook (Markow et al., 2012). Contributors to the decline in cooking know-how are mothers working outside the home and time constraints imposed by modern life (Engler-Stringer, 2010; Bava, Jaeger, & Park, 2008). These gender-based factors can prevent children and youth from learning

food skills at home. Historically, mothers were children's primary teachers for cooking skills (Markow et al., 2012). This perspective was perpetuated from FSE courses being developed to prepare young women for marriage (Markow et al., 2012). A growing perception amongst parents, and the community at large, is FSE courses have not adapted into a modern and gender bias-free subject (Attar, 1990). Therefore, parents can be hesitant to enroll their daughters to prevent damaging their modern identity (Pendergast, Garvis, & Kanasa, 2013; Ronto et al., 2017). Lack of parental support for FSE courses and the remaining influence of gender roles were primary concerns the study's results explored in-depth.

Research Question

What values do junior high students attribute to food skills education courses?

Research Purpose

To uncover students' beliefs and experiences about food skills education's role in developing food literacy competencies and healthy eating practices.

Research Objectives

The objectives of this research study were to: 1) explore how gender, perceived academic value, and exposure may impact perceptions and enrollment in food skills education courses, and 2) inform the development of future junior high food skills education curricula.

Methods

Study Design

This research study took a relativist ontology and subjectivist epistemology in line with Denzin and Lincoln (2005). It assumed there are multiple truths that can be co-created through dialogue between the researcher and participant (Mayan, 2009). The final element of the research paradigm is a constructivist perspective. This theoretical perspective recognizes that an

individual's realities are historically, socially, and culturally constructed (Mayan, 2009). A focused ethnography was the selected method to ensure methodological coherence.

Focused ethnography is a time-limited, targeted form of ethnography that explores a specific research question that is identified before the study begins (Mayan, 2009). These elements made it a feasible approach for a timeline that is limited in scope by working with a single school board. Focused ethnographies generally involve fewer participants within the same cultural group and context (Mayan, 2009). Culture is defined as an abstract concept that influences an individual's beliefs, norms, values, and behaviours (Mayan, 2009; Richards & Morse, 2007). An ethnographic lens allows the researcher to explore the concept of culture and its anticipated influence on the research focus (Mayan, 2009; Richards & Morse, 2007), in this case perceived value of FSE. FSE courses are historically and presently culturally laden due to factors such as gender and ethnicity. Therefore, the research approach was critical.

Participant Sample and Recruitment

Convenience sampling was used to select the participating school (Richards & Morse, 2007) as FSE courses are only offered in four junior high schools within the St. Albert Public School Board district (n.d.). Purposeful sampling selected 10 youth participants; all at the same school due to restricted timelines for participant recruitment. For this research study, the phenomenon was junior high students' perceived value of FSE. A sample of 10 grade eight and nine students were interviewed in June 2019. Written informed consent was secured from all parents and active assent was required from all student participants.

As the study sought to uncover both negative and positive insights, youth participants were divided into three groups, those that have: enrolled in more than one term of FSE; enrolled in one course and not returned; and never enrolled. The principal acted as a gatekeeper. This

approach was beneficial due to the principal having pre-existing, trusting relationships with the students.

Data Generation

The research question was addressed through semi-structured interviews. This allowed expansion on new ideas that did not emerge in the initial literature review (Mayan, 2009). One-on-one, in-person interviews were conducted in the familiar setting of the school (Alibali & Nathan, 2010). Questions focused on what factored into the decision to enroll or not enroll in a FSE course, what students believed they learned, and what changes could be made to potentially encourage enrollment (Appendix G). The interviews were 20-30 minutes long and were documented by a tape recorder and field notes. The interview guide was piloted before being used in the formal research study. The pilot data were not included in the analysis.

A demographic question on gender was included due to its anticipated influence. The term gender was selected as opposed to sex due to food skills historically being associated with the female 'identity' (Attar, 1990). Gender is defined as the state of being male, female, or other in a cultural or societal context (Hyde et al., 2012). The use of the term 'gender' was also recognized as a potential emotional trigger.

Data Analysis

Interviews were transcribed verbatim which supported familiarization with the data. Latent content analysis followed the inductive cyclical process outlined by Mayan (2009). The first step was to code the data based on emerging patterns and ideas. Data codes were reviewed and consistencies highlighted. A colour-coding approach was implemented to allow for a visual representation of identified patterns. Once coding of individual transcripts was complete, the data

were categorized. Coloured sections of the data were manually cut out and sorted into 10-12 categories. Four main categories were then developed to depict emerging themes.

Results

This section will outline results from the 10 student interviews. Four main categories were uncovered, each with two to four relevant sub-categories. Figure 4-1 highlights the interrelationships of the four main categories: Learning, Family, Gender, and Independence. Each main category will subsequently be described in detail. Figure 4-2 showcases the ensuing sub-categories.

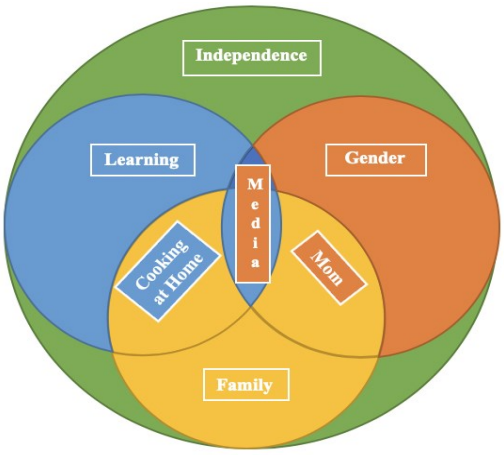

Figure 4-1: Holistic Overview of Results Main Categories

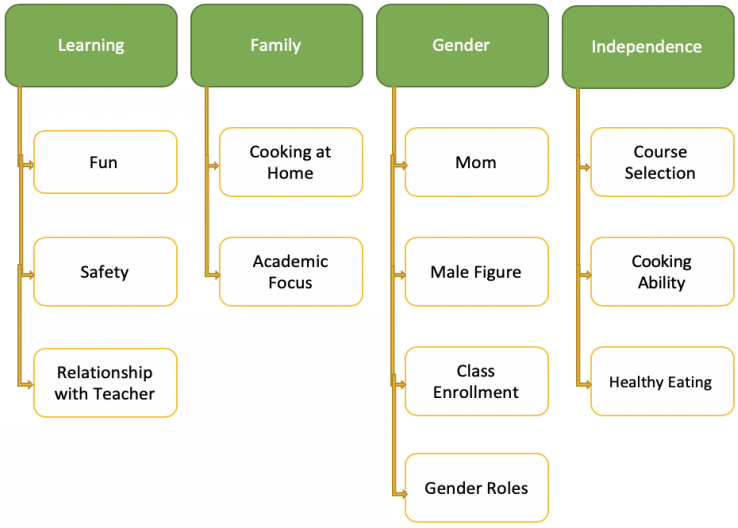

Figure 4-2: Sub-categories of Results Main Categories

Learning

Learning was regularly referenced when students discussed the perceived value of FSE and why they may or may not have taken or continued with the course. Peers and teachers were found to be key factors in this category. The specific sub-categories identified in the data are: Fun, Safety, and Relationship with Teacher.

Fun. This sub-category developed in the context of students associating having fun with active learning. Fun had two distinguishable sub-categories: Friends and Class Experience.

A vast majority of students mentioned friends when talking about having fun in a FSE class. Certain students even acknowledged that friends were the primary reason they enrolled, "One of the main reasons I took it again this year was because it's a fun class to take with your friends." (#5, p. 4) Their importance was showcased when participants measured how much fun they had based on whether or not friends were with them, "In eighth grade, some of my closest friends were in there…. if all of you got in you'd have a really good time but if only some of you got in then it would be less fun." (#4, p. 5) At times, friends choosing not to take the class resulted in a participant dropping out, even if they had a positive experience with the class before.

The importance of taking the class with friends led to students strategizing before signing up, "I have a big friend group that we all decided together, we're like, "Yeah, let's do food class!" (#7, p. 4) Foods class also provided an opportunity to meet new people, "We could meet new people and then bond over food." (#7, p. 4) The ability to bond over food was positively reflected on by a number of students, "You get to cook with your friends and then you kind of share the memories to of making things." (#6, p. 5) Creating positive memories and making new friends were identified reasons to why students continued in the class, even into high school.

When remarking on the overall class experience, many participants talked about certain recipes or techniques they had learned, “I actually enjoyed being in the classroom and doing the recipes…. it was foods that you would actually eat at home or that you would want to make.” (#6, p. 4) Students also appreciated the boundaries created by the teacher to ensure they could still have fun while simultaneously gaining knowledge. Often, this would enhance students’ likelihood of remembering what had been taught, “I talk about it a lot and what I’ve learned. But, I think that’s because I enjoyed it so much and I was just paying attention.” (#4, p. 9)

Students also liked that the class was a break in the day; allowing them to de-stress and relax, “It’s just like, a more chill option…if I’m stressed, I know if I go to foods it will be fun.” (#3, p. 7) A popular added bonus was eating the food, “You can eat after and it’s fun to try what you made…. you start with a bunch of ingredients and then it makes something really good!” (#6, p. 8) Being able to cook safely though was commonly identified as a significant lesson. This will be further explored in the following sub-category.

Safety. When asked “What did you learn in a FSE class?” a majority of participants cited safety. It will be expanded on under the context of learning due to its perceived importance in the course content. This sub-category targeted appliance safety given that many students referenced their newfound knowledge on how to properly use ovens and stoves. This was valuable as participants considered heated appliances dangerous, “Definitely learned…the use of stoves…because those are, can be more dangerous.” (#2, p. 2) Certain students even deduced that heated appliances are more dangerous as they can start fires, “That’s definitely what sticks with me because it’s good not to set your house on fire and to be safe.” (#3, p. 8)

The participants talked about regularly implementing their knowledge on heated appliances at home and when babysitting, “I think more safety rules, especially maybe

babysitting to. There's more caution when I'm cooking there and if they want to help…. when the stove is hot boiling water, how to turn your handles in and out." (#6, p. 6) Prior to taking a FSE course, some participants admitted a barrier to cooking was being uncomfortable with ovens and stoves, "I remember before I would go to cook and I would be almost afraid of all of the heat elements…. Now…. I'll just wear an oven mitt." (#7, p. 5) Once students learned how to use the appliances safely, they felt they had more freedom in the course and at home. This was referenced when discussing the difference between a grade seven and eight FSE class, "We got to use the oven.… We were allowed to use a lot higher heat." (#1, p. 2) This allowed for more diversity in recipes and techniques taught by the teacher.

Relationship with teacher. This sub-category arose when students spoke about having a positive or negative experience in a FSE course. Participants would comment on their teacher's willingness to answer questions and having a sense of humour. They also appreciated when the teacher provided substitutions for different food restrictions, "I liked my teacher…. if you're allergic or if you're vegetarian or something, she'll give you a different recipe where you can substitute it." (#6, p. 4) Other students talked about receiving copies of recipes made in class; an appreciated resource as students would make recipes they particularly enjoyed at home, "At the end of the year our teacher wrote down all the recipes in a little booklet and then she photocopied a bunch…. whichever ones you liked you could just try them just for like, easy recipes at home." (#9, p. 6) Having a positive perspective on the teacher enhanced the probability students would continue in the course. A negative student-teacher relationship could act as a prohibitor.

Certain students remarked on a tense course environment due to the teacher. In particular, some admitted they felt judged when they made mistakes, "My teacher…. was always very judgemental about if we messed up or if we didn't do something right…. It's a bit of the reason

why I didn't take it in grade nine." (#7, p. 7) This reasoning was even shared by students who did not feel targeted, "She was super nice to me but I know that she was really strict with other kids." (#9, p. 8) Creating a supportive learning environment was important for students both in school and at home. As a result, the next category to be explored is Family.

Family

The concept of family had a number of factors that directly influenced participants' perceived value of FSE. This included exposure to cooking at home and parental support when taking a FSE course. The specific sub-categories therefore are: Cooking at Home and Academic Focus.

Cooking at home. This sub-category was relevant to the research question as it showcased the difference of opinion amongst students who had or had not been exposed to cooking. As will be highlighted, those who had were more likely to recognize the value of learning the life-skill of cooking. In contrast, it could at times limit the perceived importance of enrolling in an FSE course as they were already learning about cooking at home.

Many students who took an FSE course reflected positively on prior experiences they had with cooking at home. This included baking with siblings or helping prepare family meals. Students who were involved at home were more likely to associate cooking with experimentation or experiencing different cultures though food. One student talked about how culture was showcased in her dad's cooking, "My dad really loves to cook. He is more or less like a Native American kind of style cook so you get to taste a whole variety of things." (#1, p. 4) Cooking at home could also enhance student's confidence in their own skills and abilities. Participants also noted how cooking at home allowed them to spend time with their family; a rarity due to difficulty with integrating busy, individual schedules, "Having all six of us for one meal, it's rare

because we're so busy….. everyone being able to have dinner together, my parents love it…. we just all get to talk. So, it's really nice." (#4, p. 6)

As mentioned, learning to cook at home could also be a barrier to enrolling in a FSE course as students could justify pursuing other options, "I was more interested in the other options and I felt like my parents could teach me all I need to know about cooking." (#8, p. 3) This perspective was particularly common amongst male participants. Another identified reason to not take a FSE course was the prioritization of academics. This will be expanded on in the following sub-category.

Academic focus. Academic focus was a prominent sub-category when discussing family. This was not expected due to participants being in junior high. Many students disclosed how academics are prioritized in their family, "It's a top priority in my family, for like school and academics." (#4, p. 9) The interpretation of what is academic sometimes resulted in students being pulled from an FSE course in lieu of academic coaching. This experience was outlined by a female student who had enjoyed the course, "I was going to do it as my option B but I had to take academic coaching because my grades weren't doing so well." (#4, p. 4) This student acknowledged she will be returning to foods in high school as she will have a tutor, thereby allowing time in her schedule for the course. Similar to the above quotation, many students specifically referenced their parents when defining 'academic'. A limited number believed it was an autonomous decision to take academic coaching instead of foods, "I was going to take it but then I decided not to…. we have an option for academic coaching…. I wanted to take that instead of foods." (#7, p. 3)

It was anticipated FSE courses may be considered less valuable to core courses such as math or science. This perspective was found in research conducted by Hall and colleagues

(2016). As expected, it was noted by a majority of participants. Although certain students mentioned their family does think it is important to learn life skills such as cooking, it can just be taught at home. The unexpected finding was FSE is considered less academic when compared to other options.

A number of participants admitted they were not planning on taking foods in high school. This was a result of selecting options they felt were more related to what they may study in university and their eventual career, “I think in grade 11 and grade 12, I’m going to try and focus more on sports medicine just because that’s what I want to pursue in University and as a career.” (#5, p. 7) This was often supported by parents, “I’ve had the conversation with my parents for a few years about what career path I want to take. So, they were in support of the technology options I chose.” (#8, p. 9) At times, parents would even discourage students from taking a FSE class in high school to ensure time for more academic options, “If it didn’t make sense, my parents would probably be a little bit hesitant about it [her taking foods]. Just because I don’t want to be like a culinary chef or anything and I already do baking and stuff at home.” (#5, p. 8)

This prioritization of more academic-based options was shared by both male and female students. Some participants warranted the decision by stating they had taken the course for multiple years in junior high or that they would continue to cook at home. Many students reflected on how much they learned in the junior high course and their positive experience. The culmination of the course was often increased confidence and the capability of teaching others. The idea of teaching others was often embedded within a gender bias.

Gender

An objective of this study was to see if gender is still an influential factor in the perceived value of FSE in modern day society. The results show that although perspectives have changed,

gender-based stereotypes remain present amongst youth. The category of gender had four sub-categories: Mom, Male Figure, Class Enrollment, and Gender Roles.

Mom. An interesting finding was eight students distinctly spoke about their mom when asked about their experience cooking at home. Subsequently, they explained their mom was the primary cook at home, a natural teacher, "My mom. She was always in the kitchen. … I learned a lot from her." (#1, p. 2) Another student said, "I have three siblings so my mom cooked a lot growing up… So, I've always helped cook." (#4, p. 1) Moms were also responsible for tasks such as grocery shopping and providing healthy alternatives, "My mom…. she wouldn't get those granola bars that you can get that are chocolate covered. She would get the ones that are covered in yoghurt or something. Just that kind of healthy alternative snack." (#9, p. 3) At times, this prioritization of healthier snacks motivated students to learn how to cook or bake:

> My mom would never buy any sweets for the house… She'd buy healthy food and stuff. Obviously, as a little kid I would be like "I want cookies!" ….. and my mom refused to make them. So, I kind of grabbed her iPad and then searched up cookie recipes and I would take all the ingredients and make them. (#9, p. 3)

The consistent reference to moms being the family's primary cook may indicate that traditional gender roles still exist. As will be explored further on in the paper, gender roles were still trickling down to younger generations.

Some female participants spoke about the significance of baking and cooking with their mom, "Yeah, like baking and stuff, we always did that together which was fun." (#3, p. 2) This positive aspect of the relationship sometimes encouraged students to cook solely to make mom happy, "The first thing I made I was, I think six, and I made it for my mom and I was really into making her breakfast in bed." (#9, p. 2) Another student further elaborated that she could remove

strain from her mom by cooking hopefully resulting in her entire family being happier, “I just wanted to make my family happy because my mom always cooks. So, I wanted to learn how to cook.” (#3, p. 1)

Associating cooking with moms also led to students asking them for advice on whether or not they should take a FSE course, “I’ve talked to my mom about it and she really liked foods when she did it….we just kind of talked about it together and shared the experiences.” (#6, p. 9) This female participant ultimately chose to take the course. On the flip side, moms could also prevent a student from enrolling, “I think I didn’t take it only because I knew a lot. My mom had already been teaching me how to cook.” (#10, p. 9) Being able to learn from mom at home was a common reason to not take a FSE course, particularly for male participants.

It was also found that moms influenced the frequency students cooked at home. For instance, two students admitted they were cooking more due to their mom’s entering the work force or taking on more hours, “My mom is normally working a lot so I have to make dinner most of the time.” (#10, p. 2) One female student described learning how to cook alongside her dad as her mom was working longer hours, “It’s fun because this year my dad is learning how to cook too because my mom works a little more.” (#3, p. 2) The role of male figures in regard to FSE is the next sub-category that will be explored.

Male figure. Few students referenced a male figure when asked about cooking at home. Often, a dad or brother was only mentioned when asked specifically about male role models in cooking. Only two students discussed their dad having an active role in both preparing meals and teaching them how to cook. For one student, it was due to her parents’ divorce, “They are divorced so they both have to make meals.” (#2, p. 1) Dads who were more present often completed more male stereotypical tasks such as BBQing, “My dad taught me how to use the

BBQ when I was about six but that was about it." (#8, p. 2) Another student said, "I grew up with my mom and my dad both doing equal jobs. My dad is always on the BBQ and my mom was always in the kitchen doing vegetables." (#1, p. 7) Some students were honest and admitted their dad never taught them how to cook. This was generally due to their father living or working out of town, "My dad used to live in [community in Alberta] for a while so…he didn't get to teach me anything." (#10, p. 2)

In regard to FSE classes, some students cited encouragement from brothers to enroll, "Before grade seven my brother went to this school and he took foods and… he really enjoyed it." (#2, p. 3) Dad's only provided advice on the course in tandem with moms. A visible influence on class enrollment based on advice from dads could not be identified.

Class enrollment. The influence of gender may be indirectly recognized given the consensus amongst students that FSE courses attract more females then males, "There is usually, obviously, more girls then guys." (#5, p. 9) A gender gap was credited by those who had not even taken the course, suggesting it is well-known within the student body. Certain participants also illustrated how the gap widens with age. This was justified due to the belief that younger individuals are more willing to try new things, "There were definitely more guys in seventh grade because when you're younger I guess you are more open to everything." (#3, p. 9)

A majority of students felt the gender discrepancy did not influence their decision to take the course or not. As stated by a male participant, "I know in the grade seven class, foods is mostly girls…. I don't think that shied me away from foods." (#10, p. 6) Conversely, some male students had to be persuaded to join by female friends, "Guys that I am now friends with who took it other years, it was because their friend that was a girl was like "Let's take it."" (#4, p. 10)

It was categorically agreed that male students were more likely to enroll in options such as fit for life or industrial arts. As referenced by a female student, "I think people usually think boys do more hard labour stuff…. industrial art is an option…. Then girls usually do cooking and cleaning or drama type thing." (#9, p. 9) Some participants believed the division was because different genders have different interests, "Guys have less of a curiosity in how to do it. And, they just aren't as interested as girls are and they think it's probably more feminine." (#3, p. 9) As indicated, a few students deduced that the continual gender gap in FSE courses is a direct result of gender stereotypes, "I think it's because of the stereotype. They just see it as women are supposed to be in the kitchen…. It's more of a girl thing…. their (male) stereotype is being in a sporty option or a woodshop option." (#6, p. 10) This determination will be expanded on further in the next sub-category, gender roles.

Gender roles. The continual influence of gender roles can be discerned throughout the category on gender. The final sub-category explored whether youth believe gender roles exist in modern day society and if it impacted their perceived value of FSE. During conversation, most students initially referenced historic, traditional responsibilities. As their responses progressed, it often divulged into an acknowledgement of gender roles in a modern day context. Certain female students admitted a sense of obligation to take a FSE course because of gender roles. This progression and outcome is illustrated in the following quote:

> If you think back a way long time ago, women were always in the kitchen and stuff like that. And I just did not know how to cook very well. I knew some things… But… when you're older, not to be stereotypical or anything, but the stereotype is that the mom or the women cooks in the house. So, I just wanted to know how to cook better and that's why I felt obligated because women are always associated with that kind of thing. (#6, p. 9)

Another female participant had a similar experience, “The stereotype where girls know how to cook and girls should cook or be the cook in the house for family when you’re older…. I’m just kind of like, “Well, in that case. Maybe I should learn a little?”” (#7, p. 8)

Two methods of communication were found to pass on gender roles to younger generations. The first method was family members. One female student took a FSE class primarily due to the following encouragement from her grandma, “My grandma said that it will help me for when I’m older, and when I have kids, then I’ll not butcher steak or something when I’m trying to make it and not always have mac and cheese for supper.” (#7, p. 3) The expectation that females be the primary cook for future families was noticeable in a few responses. Another female student said teaching her future daughter to bake would be a key part of their relationship, as it was with her mom, “Just like, a daughter thing. If I have a daughter, I would want to teach her how to bake.” (#3, p. 2) The second method of communication was media. A female student conceded she felt pressured to take a FSE class because of how TV shows portray females, “I always see TV shows where it’s like “The women should cook” or even if they don’t even say that then it’s always the women who are cooking.” (#7, p. 8) It should be noted that media could also be a positive tool. Four students used resources such as Pinterest and YouTube when learning how to cook, “Me and my sister…. we kind of make meals together…. we always try to make the healthiest ones and pick them up off of healthy recipes and Pinterest.” (#4, p. 8)

Students with families who shared cooking responsibilities were less likely to feel pressured into taking a FSE class, “Foods, I don’t think it had a role as a female because all my brothers and my dad know how to cook…. it was never just a girls thing.” (#4, p. 9) Those students often also had more autonomy in their overall course selection. This outcome will be explored further in the final main category, Independence.

Independence

Independence was the desired outcome of a FSE course. This finding aligns with previous research conducted by Slater and colleagues (2018). This category's broad focus led to it being overarching, as represented in Figure 4-1. The data was sorted into three sub-categories: Course Selection, Cooking Ability, and Healthy Eating.

Course selection. As referred to earlier, some students felt they had complete autonomy in choosing their options. This independence was primarily given by parents; which led to many participants stating the parental support they had in taking, or not taking, a foods skills education course, "They think that my options are my choice. So, if I want to take foods, if I don't want to take it, that's great." (#5, p. 4) Certain students discussed how this approach trickled down into other aspects of their life, "My mom has always been the kind of person where it's just like, make your own decisions. She's never really made decisions for me when it comes to what I want to do for sports and stuff like that." (#9, p. 7) At times, independence in course selection was presented with caveats. One student explained she could choose her options if she did well in her academic courses. This condition sometimes led to students losing their autonomy.

Independent students described how selecting their options built confidence in their decisions. Particularly, if faced with a negative response, "Once I set my mind to something I don't really, per se, care what other people's opinions is on it." (#7, p. 5) This expression of self-determination led to that student participating in the course for multiple years. Independence was also mentioned in the context of personal cooking abilities, our next sub-category.

Cooking ability. The importance of being able to cook for oneself was clearly illustrated by students who had, and had not, taken a FSE course. Cooking skills were referenced when participants reflected on growing up and moving out of the family home, "It kind of prepares you

for when you're a little bit older….whenever you are living alone and you need to make a good meal instead of just getting Kraft Dinner." (#9, p. 10) This desired outcome was also specified by students who had no interest in taking a FSE course. As distinctly put by a male participant, "Cooking isn't really a passion of mine. I just want to know enough to get through life." (#8, p. 4) When asked to expand on their meaning, they said, "If I'm living alone, I want to be able to cook myself breakfast, lunch, and dinner." (#8, p. 4) Cooking skills in the present tense could also be used to showcase growing maturity to parents:

> Since I'm the middle child, my mom always wanted to like, she'd always baby me and baby my little sister and then my older sister would just kind of do her own thing and I wanted to show my family that "Yeah, I can do this now." Like, "I'm good!"" (#7, p. 6)

Maturity was noted by another student when pointing out her increasing responsibilities, "As you grow, you become more mature and so you start learning more things and I think when you're older, you get trusted more to cook at home and you're more independent." (#6, p. 7) This volition led to some students making recipes they learned at school for their families, "I'll make my sister something, she'll make me something, and it's more because we've taken foods now and we kind of know how to use the stove and different meals to cook." (#6, p. 7)

It was interesting how many students used descriptors such as "good" or "healthy" when discussing making meals. This trend will be expanded on in the final sub-category, Healthy Eating.

Healthy eating. Many students wanted to learn how to cook to avoid eating "junk"; defined as foods that were processed, high in sodium, and had higher caloric intakes. Four participants specifically identified Kraft Dinner as a food they did not want to over-consume, "When you move out, your mom and parents aren't going to be there to cook and you can't be

eating Kraft Dinner all the time." (#10, p. 4) The identified impulse to prevent a future reliance on junk food was a common motivator, "I think these courses are just good for independence because now when we're older, we won't have our parents and I'd rather not just eat a bunch of junk." (#3, p. 10) Avoiding unhealthy food options was also acknowledged by family members when encouraging students to take an FSE course.

Some students even deduced that individuals rely more on convenience foods when they do not know how to cook, "They (students who do not take the course) will go the less healthier route than the healthier route because of the restaurants." (#3, p. 10) This is a finding supported by previous research conducted by Markow and colleagues (2012). As expanded on by a male student, "Cooking is definitely a skill that everyone needs to do or know. Or else you're not going to have a healthy eating style later on." (#10, p. 7) It is important to highlight that barriers to cooking were recognized by some participants, "Cooking can be a better healthier version than the pre-things and fast food restaurants…. even if cooking yourself is a little less convenient." (#3, p. 10) The most prominent barrier was time, "Sometimes, it's just finding the time …. I'm very busy." (#5, p. 3)

Discussion

This section will outline main recommendations that arose from interviewing 10 junior high students. It is evident further research must target students' perspectives. In addition, certain changes to the FSE curriculum should be considered and implemented. Each recommendation aims to address the current gender gap in FSE courses, a key finding of the study. They will now be examined in-depth with the support of pre-existing research.

Recommendation #1: Introducing FSE at a Younger Age

A number of students believed FSE should be introduced at a younger age, a change WHO (2004) supports. The WHO Global Strategy on Diet, Physical Activity, and Health clearly states that FSE should be available in primary school (WHO, 2004). Children as young as seven are curious about food (Caraher, Baker, Burns, 2004). They want to learn how to cook so they can become more involved at home (Groves, 2002). In a study conducted by Groves (2002), it was shown that 82% of children aged seven to nine years old enjoy cooking at home and 41% want to cook more. This is in part due to children associating food with expressing love for family members (Caraher et al., 2004), an incentive that emerged during student interviews. Participants believed introducing FSE at a younger age would enhance interest in the course when older, which may lead to more students enrolling. This hypothesis should be explored in future research.

Recommendation #2: Promotion of FSE Classes

Research has begun to link a decline in cooking with changes in school curricula (Stitt, 1996). Specifically, the decision to 'optionalize' FSE courses (Stitt, 1996). Certain experts think this may lead students to believe food skills should solely be learned at home (Stitt, 1996). This perspective was commonly illustrated when students talked about why they did not take a FSE course. This is concerning as schools are a key secondary environment to learn about food skills (Lang & Caraher 2001; Caraher, Dixon, Lang, & Carr-Hill, 1999), particularly, if youth are not being exposed at home.

Promoting the course could directly rebut such a misconception. One participant suggested principals should mention it during student recruitment, "When the high school principals came in to talk…. They mentioned a lot of athletic activities…. You could always add

foods into that." (#10, p. 7) This would move beyond the current passive approach of simply including the course on registration papers. An active approach could be effective as students are more likely to implement advice on course selection when provided by principals, teachers, or guidance counsellors (Stone & Clarke, 2001; Munro & Elsom, 2000). Although, research has shown parents remain the most important influencers (Babin, Grant, & Sawal, 2010) which should be factored in accordingly when developing a promotional strategy for FSE courses.

Recommendation #3: Splitting Foods and Fashion Course

The final recommendation is ensuring FSE is a separate course. Similar to other schools, the participating school had combined foods and fashion into one course. The reasoning for this was not provided but it directly impacted male enrollment. Both male participants acknowledged they would be more inclined to take a solely FSE course. It was revealed certain male classmates would even enroll for the foods component and drop the course during fashion, "It is because of the sewing part…. when it is separated and it is just foods…there are more males that take it." (#5, p. 9) In addition, the study "Food Skills: An Academic Course" found schools who did offer foods as a separate course had more equal male-female enrollment.

The concept of gender and course choice first emerged in Canadian literature in the late 1900's. Jane Gaskell (1984) explored how females were more likely to choose courses that were considered useful for future domestic structures (Gaskell, 1984). Males enrolled in technical courses that supported future career opportunities such as engineering (Gaskell, 1984). As found in the data, although the influence of gender roles has shifted slightly in a modern context, it still remains. Further research should be conducted on the impact of gender and course choices in junior high schools. Currently, a majority of the literature focuses on high school and university students (Adamuti-Trache & Sweet, 2013; Hango, 2013). It is important to address the younger

population due to courses already being selected at that time based on future life and career paths.

Limitations

A potential limitation of the study is the participants were all recruited from one school. As a result, differing opinions influenced by the school environment may not be included. Data collection also took place in the final week of school which reduced the number of implemented data generation strategies. A final limitation of the study is the population of St. Albert is not diverse. Only nine percent of St. Albert residents are a visible minority (Statistics Canada, 2016) and the median income in 2015 was high at $119,905 (Statistics Canada, 2016). Therefore, perspectives based on race and income may be limited. These factors may reduce the generalizability of the results.

Strengths

The primary researcher had a pre-existing, trusting relationship with the gatekeeper which may have increased fidelity and capacity of the study (Chervin et al., 2005). The relatively young age of the primary researcher was also a strength (McLaughlin, 2006). During the interviews, it was perceived younger participants shared more as they considered the young researcher less intimidating. This may be due to it being easier to develop a rapport when closer in age. Further, they may have shared common experiences and language (McLaughlin, 2006). A final strength is thorough interviews were conducted, as scheduling was not a concern in the final week of school.

Contributions of Findings

This research study provides Alberta Education with suggested amendments to FSE course outlines. It also contributes to the on-going discussion on mandating FSE courses.

Further, it may influence future researchers to incorporate a youth perspective when exploring this topic area. More research targeting youth is needed since they are the primary recipients of FSE courses. In terms of health promotion, insights are provided to researchers and policy-makers on more innovative and active approaches for promoting healthy eating in schools.

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CHAPTER 5: STUDY 2 – FOOD SKILLS; AN ACADEMIC COURSE?

Introduction

Should food skills education courses be mandatory in junior high schools? The present food environment in Canada is struggling to promote and support healthy eating behaviours, particularly in youth (Vanderlee, 2017). This is concerning as healthy eating can reduce the risk of developing chronic diseases such as type 2-diabetes and obesity (World Health Organization (WHO), 2016). In regard to youth, it can also facilitate growth and development into adulthood (WHO, 2016). Generating knowledge around food literacy has been found to enhance healthy eating behaviours (Cullen, Hatch, Martin, Wharf Higgins, & Sheppard, 2015). Food literacy is defined as concepts targeting nutrition knowledge, food skills, and consuming healthy food options (Truman et al., 2017). Food skills education (FSE) will be the targeted focus of this study due to the rising number of individuals who lack confidence in their cooking skills (Murray et al., 2016).

The emerging value of FSE, and food literacy in general, was nationally recognized with the release of Canada's updated food guide in January 2019 (Government of Canada, 2019). The food guide is innovative as it incorporates a holistic approach to healthy eating. The recommendations are socially and culturally diverse in their aim and include; supporting culture and food traditions, cooking more often, and involving others in the planning, preparation, and consumption of meals (Government of Canada, 2019). For the latter, the anticipated purpose is to promote the sharing of food skills knowledge. Schools have been identified as an ideal learning environment for such initiatives due to the decline in the number of Canadian families who are cooking at home (Ovara, Manske, & Hanning, 2017).

School-based FSE Courses

Schools have been identified as a setting that can either hinder or facilitate youths' dietary behaviours (Sallis, Johnson, Calfas, Caparosa, & Nichols, 1997; Elder et al., 2007). It is also where youth spend a lot of time, thereby enhancing the accessibility of health promotion initiatives (Fung, 2012; Story, Neumark-Sztainer, & French, 2002). In addition, enriching students' knowledge on food literacy can enhance academic accomplishments such as literacy assessments and overall educational attainment (Florence, Ashbridge, & Veugelers, 2008). Strengthening positive outcomes in tasks such as literacy assessment helps contribute to the education system's mandated academic goals (Langford, Bonell, Jones, & Campbell, 2015). It should be recognized however, that schools can face barriers in implementing sustainable and effective FSE courses. Significant barriers include inadequate budgets and the devaluing of FSE courses. The impact of these barriers will now be explored in-depth.

Budget

Budget allocation has been identified as a primary barrier to implementing FSE courses in schools (Ronto, Ball, Pendergast, & Harris, 2017; Markow, Coveney, & Booth, 2012). This barrier is multi-faceted. First, FSE courses may require higher budgets to purchase food supplies (Ronto et al., 2017). Previous research identified food prices for healthy ingredients as a specific issue, particularly given rising food costs (Ronto et al., 2017; Dalhousie University & University of Guelph, 2019). Second, kitchen spaces can be expensive to maintain if renovations are required to the physical facility (Ronto et al., 2017). Third, research has demonstrated that financial constraints have led to unqualified individuals, such as parents or kitchen hands, teaching FSE courses (Ronto et al., 2017). Currently, FSE teachers are not required to have a background in food literacy or nutrition, which can potentially limit the effectiveness of the

course (Ronto, Ball, Pendergast, & Harris, 2016a; Markow et al., 2012). In Alberta, this is a concern as it is the teacher's responsibility to protest a job position they are not qualified for (Alberta Teachers' Association, 2018a). FSE teachers are instead selected to teach the course because of personal interest (Ronto, Ball, Pendergast, & Harris, 2016b). This practice has led to the perception within schools that course specific qualifications are not necessary to teach FSE (Ronto et al., 2016a). This perspective may have contributed to the barrier of devaluing FSE courses.

Devaluing of FSE Courses

Previous research found that other school staff, principals, and even parents may not value FSE as a subject (Slater, 2013; Ronto et al., 2016a). In regard to staff, one FSE teacher stated their peers' perspective of FSE courses as "cooking, home science, old fashioned and not really important" (Ronto et al., 2016a, p. 24). This perspective has also been identified in parents through their promotion of students towards more academic courses, such as math or science, rather than FSE courses (Ronto et al., 2016a; Ronto et al., 2017). An additional consequence of such perspectives is learning resources and training opportunities focusing on FSE are not accessible upon entering the teaching profession (Ronto et al., 2016a). Teachers believe resources are restricted due to the curriculum either being outdated or simply not existing (Ronto et al., 2016a; Slater, 2013). It has also been alleged that this issue becomes more significant due to time and funding being restricted with the "optionalization" of FSE courses (Lichenstein & Ludwig, 2010; Slater, 2013). Finally, the devaluing of FSE has led to a shortage of qualified teachers; a contributor to this deficiency being the closure of specialized post-secondary programs in Canada (Colatruglio and Slater, 2014).

Considering all these barriers, it is important to target the perspective of two key stakeholders, principals and FSE teachers. These positions are instrumental in the implementation of high-quality FSE courses and the creation of supportive healthy eating environments in schools (Gussow & Contento, 1984; MacLellan, Taylor, & Freeze, 2009; Evans, 1996). Their perceptions are also important due to the identified impact they can have on the implementation of a new or revised curriculum (Fullan, 2016; Fullan & Miles, 1992; Kirk & Macdonald, 2001). The implementation's success is strongly associated with such stakeholders being involved at the onset, making them critical participants in this research study (Kirk & MacDonald, 2001).

Research Question

What values do junior high principals and food skills education teachers attribute to food skills education?

Research Purpose

The purpose of the research study will be to explore food skills education's contribution to lifelong healthy eating behaviours as well as barriers and facilitators to the effective implementation of school-based courses from the perspectives of junior high principals and food skills education teachers.

Research Objectives

The objectives of this study were to:

1) Identify junior high principals and food skills education teachers understanding of food literacy.
2) Provide insight into the role of staff in promoting and supporting students' food literacy levels and healthy dietary behaviours.

Methods

Study Design

The selected research method was focused ethnography. This is a time-limited, targeted form of ethnography that explores a specific research question that is identified before the study begins (Mayan, 2009). When compared to traditional ethnography, it is more problem-focused but still incorporates a cultural lens to understand how the social context is shaped by individuals' beliefs (Rashid, Hodgson, and Luig; 2019). Focused ethnographies typically incorporate a reduced number of knowledgeable informants within the same cultural group and context (Mayan, 2009). For the purpose of this study, culture was defined as an abstract concept that influences an individual's beliefs, norms, values, and behaviours (Mayan, 2009). Methodological coherence was achieved by incorporating a relativist ontology, subjectivist epistemology, and constructivist theoretical perspective. This research paradigm recognizes an individual's realities are historically, socially, and culturally constructed (Mayan, 2009). This perspective is appropriate as FSE courses are presently and historically culturally laden due to factors such as gender and ethnicity.

Participant Sample and Recruitment

Convenience sampling (Richards & Morse, 2007) selected the participating schools, as FSE courses are only offered in four junior high schools in the St. Albert Public School Board district (n.d.). The sample of this research study included three junior high principals and three FSE teachers. Participant recruitment occurred in June 2019. Potential participants received an introductory e-mail containing the study's information sheet and consent form (Ronto et al., 2016b). The signed consent form was returned by e-mail or hard copy. Ethical approval was sought from the Research Ethics Board at the University of Alberta and the Cooperate Activities

Program. This research study explored the phenomenon of the perceived values junior high principals and teachers attribute to FSE.

Data Generating Strategy

The data were collected through semi-structured interviews which are commonly done in conjunction with focused ethnographies (Mayan, 2009; Richards & Morse, 2007; Ronto et al., 2016b; Hartmann, Dohle, & Siegrist, 2013). One-on-one interviews were selected as the research questions were exploratory in nature. Open-ended questions were prepared in the form of sample-based interview guides (Richards & Morse, 2007). The questions focused on the participant's background, their understanding of food literacy, and their perceived role in enhancing youth's food literacy levels and healthy dietary behaviours. The interview guides for the principals and FSE teachers had a similar focus. One primary difference was principals were asked about budget allocation. A pilot interview was conducted with one FSE teacher in June 2019. As a result of this interview, minor changes were made to the terminology and order of the interview guide (Ronto, Ball, Pendergast, & Harris, 2016b). Data generated from the pilot interview were included in the analysis.

Four interviews took place in the respective schools. One principal required a phone interview and the pilot interview was completed at the University of Alberta. The interviews were 30-60 minutes in length and were documented with a tape recorder and field notes. Data generation occurred in June 2019.

Data Analysis

Interviews were transcribed verbatim by an external source. Latent content analysis was the implemented analytical technique as it is generally done in conjunction with focused ethnography (Mayan, 2009; Richards & Morse, 2007). The inductive analysis approach followed

the cyclic process outlined by Mayan (2009). Primary patterns within the data were identified, coded, categorized and themed (Mayan, 2009). The first step was to code the data based on emerging patterns and ideas (Mayan, 2009). I then familiarized myself with the data and while reviewing, highlighted certain consistencies. A colour-coding approach was implemented to allow for visual representation of identified patterns. Once the coding was complete, the data were placed into 8-10 categories. A manual process with scissors and file folders was used (Mayan, 2009) These categories were then combined into the four main categories which emerged as the final results. Data analysis was completed in November 2019.

Researcher Reflexivity

Guba and Lincoln (2005) have maintained that reflexivity "is a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself." (p. 210). Therefore, it is important to identify certain viewpoints and factors that the primary researcher brought to the research study. First, I had a pre-existing relationship with one of the junior high principals and one of the FSE teachers. The potential for bias from the pre-existing relationships was mitigated by meeting consistently with the thesis supervisor. Second, I aimed to remain politically neutral as the curriculum update (Alberta Education, 2018) was a highly publicized political debate in Alberta during the research process.

Results

This section will outline results from interviews conducted with three FSE teachers and three junior high principals. Four main categories were uncovered: Promoting Healthy Eating,

Curriculum, Job Qualifications, and Budget. Identified sub-categories are outlined in Figure 5-1. Each category will be examined in-depth.

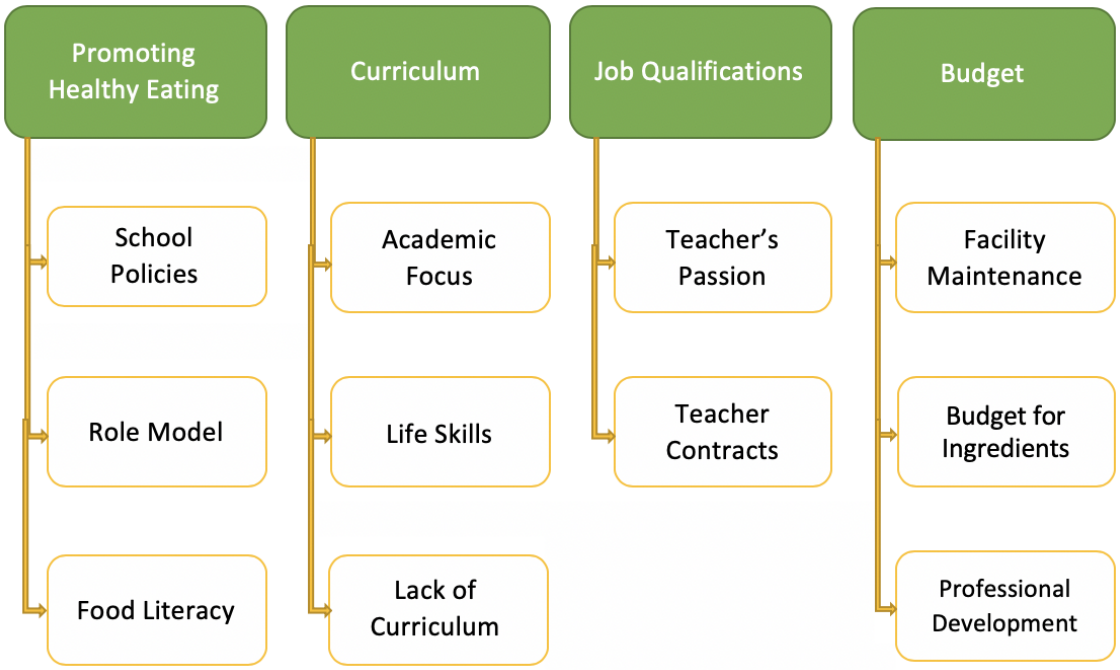

Figure 5-1: Results Main Categories and Sub-categories

Promoting Healthy Eating

The significance school principals and teachers placed in promoting healthy eating to students was encouraging. Participants felt it was important as schools were considered an ideal learning environment for health promotion initiatives (Fung et al., 2012). The three sub-categories included: School Policies, Role Model, and Food Literacy.

School policies. Most participants spoke openly about school policies that promoted healthy eating. This included restricting the sale of unhealthy food options in school canteens and removal of vending machines, "We used to have vending machines and we took them out three or four years ago." (#P3, p. 12) It was consistently expressed that schools were trying to promote healthy eating. Most thought more could be done, "We have a concession…we don't

have… French fries or things like this… We're trying to do something. But do we do enough? I guess perhaps not." (#P1, p. 17) Potential changes included preventing pizza sales, "Schools can do… the education piece and not offer the unhealthy choices…maybe we don't do pizza on Fridays." (#P3, p. 11) A recognized barrier was the loss of school income, "Having pizza fundraisers all the time… they fundraise a lot of money very quickly." (#T3, p. 32)

An additional barrier was lack of support within the school community, "We have a policy, no Monster drinks… in class but …teacher's…they allow junk in their classrooms." (#T1, p. 17-18) Even with these barriers, participants were still open to further implementation of healthy eating initiatives. The best way forward, however, had not been identified, "Can we do better? I think we can. I'm not sure exactly how yet, but yes, we should." (#P1, p. 18)

Role model. FSE teachers felt a sense of obligation to be role models, "They observe me eating what I eat …and… sometimes that's how they've related me… "Oh yeah, you probably wouldn't eat that because that's not very good for you."" (#T1, p. 17) This obligation often led to FSE teachers implementing healthy eating rules in their classroom, "They're only allowed to bring healthy snacks into the classroom…they're not eating chips and drinking energy drinks." (#2, p. 19) As stated by another teacher, "No junk food… No chips. No pop. Just kind of my rule…You can only eat it if it's healthy in class." (#T1, p. 17) They felt their peers should share this responsibility, "Other staff…modelling healthy eating for students and seeing what they have for their lunches." (#T2, p. 19) As mentioned earlier, this was not always the case.

Teachers accepted being a role model but viewed parents as the ultimate educator, "We play a role in giving them (students) the information, but…. it's the families that ultimately make or break what those kids are eating." (#P3, p. 11) As shared by another principal, "Kids are going to do what their parents do…and that's as simple as that." (#P1, p. 10) Reflecting on the role of

parents often led to examples of when they enabled students to access unhealthy foods, "7-Eleven is down the block, so the kids are going to go there … and the parents are giving them money to go." (#P3, p. 12) Participants thought accessibility to external unhealthy food options limited the effectiveness of school policies, "Where do many kids go right at lunch time? Reddi Mart to buy their Slurpee or some even to go to Wendy's…on a regular basis." (#P1, p. 18) This easy accessibility highlighted the importance of enhancing students' food literacy.

Food literacy. All participants believed students should have a stronger understanding of heathy eating and greater food literacy, "To be aware of what you eat should be interesting, it should be important… to all of us… to be at least able to make informed choices about what you decide to buy and cook." (#P1, p. 6) One principal talked about schools being the ideal learning environment, "Schools probably play the biggest role in promoting the guideline (Canada's food guide)." (#P3, p. 10) This was due to schools being where, "They're hearing about it the most." (#P3, p.11)

Recognition of the value of food literacy would develop into conversations on what schools could do. This included supporting the discussion on mandating FSE courses and the potential creation of innovative health programs, "We're very interested in creating a health program… it (is) going to be a five-year project to get us to where we can be… eating is of course one of those cornerstones to… have healthy young people." (#P2, p. 7)

The anticipated outcome of all these approaches was students becoming, "reflective about what they're doing with their own bodies." (#P2, p. 11) Knowledge is power and schools are willing to adapt to the changing interests of students surrounding healthy eating. This led to one principal stating, "We need to teach kids about specific diets and specific needs … things in which kids… should be aware of and… have some experience in preparing and knowing the

variations." (#P2, p. 5) No matter the approach, participants were united in their belief that learning about food literacy and healthy eating belonged in schools and course curricula.

Curriculum

The impact of a curriculum, or lack thereof, was a significant finding. The topic of mandating FSE courses consistently emerged as part of this discussion. This category consists of three sub-categories: Academic Focus, Life Skills, and Lack of Curriculum.

Academic focus. This main category was congruent with a viewpoint of restraint. Many principals acknowledged the increasing prioritization of core subjects within curriculum requirements; often at the expense of time allotted to options. One principal talked about how FSE courses used to be mandatory for certain students. It became an option course after a curriculum update. Some principals showcased concern over the growing significance of core subjects both formally and informally, "(A) school…maybe 20 years ago, had fairly poor results on the provincial achievement test…the principal…decided to cut on the industrial arts time to increase time in language and math…that's criminal." (#P1, p. 7) Teachers admitted this still occurred, "I've had on numerous occasions kids pulled out of option classes to go and finish core subject work." (#T2, p. 20)

Many participants felt the curriculum's academic focus was limiting student's personal growth, "If we aren't giving children opportunities to… work on personal growth and well-being… then we're missing something." (#P2, p. 11) This led to calls for a redefinition of what is expected from students. One principal spoke about the role technology played, due to the ability to always access student marks, "I'm afraid we create a generation of students and parents obsessed with marks. And it's not great. You're not defined by a number on PowerSchool. You have to be more than that. We have to." (#P1, p. 8)

All principals supported a more holistic approach in both curriculum requirements and school policy, “We… include all the option marks… for receiving honours, we… give them percentages on par with the others courses… to give them that parity… is a really important statement.” (#P2, p. 13) It was anticipated this would not remain feasible due to the ever-adapting curriculum. Another principal touched on the importance of incorporating life skills into student’s education, “We have a society where we proudly show our achievement test results… We strive for good marks… at the same time… we also need to have those life skills.” (#P1, p. 8) The conversation on life skills often transitioned into the potential of mandating FSE courses. This will be discussed further under the sub-category: Life Skills.

Life skills. Participants felt FSE helped develop an individual’s independence and autonomy, “It is a life skill that I think most people should have, learn.” (#T1, p. 16) This belief led to an agreement that FSE should be provided at all schools in some manner. A unique focus that emerged was ensuring students with special education needs had access to FSE courses. This concept was explored in-depth by the principal of a school with a high population of special needs students, “We try to timetable for those kids (special needs students) to have more time in the foods program. We call it life skills.” (#P1, p. 3) The additional timetabling was possible due to different curriculum requirements, “Some special needs programs… have this additional component fit in their schedule. Sadly, I cannot do that for all the kids.” (#P1, p. 3)

The purpose of targeting life skills was to enhance autonomy and provide exposure for potential work placements, “Very respectfully, some of our special need kids… they will not go to university necessarily…many of them actually work in the food industry… they have different gifts and talents…to have this pre-exposure is great.” (#P1, p. 3) This program often went further than other FSE courses by incorporating grocery shopping, “It’s a life skill that they’re going to

need to learn… where in the grocery store do we find things?" (#T2, p. 16) This approach is not feasible for all students due to scheduling constraints, the most common barrier to be identified.

A majority of participants philosophically supported the idea of mandatory FSE courses. Logistically, many referenced the barrier of time, "In an ideal world, it's a life skill and it would be great. But there is just not enough time in the day to make everything mandatory." (#P3 p. 13) Some participants talked about incorporating healthy eating in a mandatory health class instead, "The only way… is putting it into a health program in which we go beyond just healthy eating." (#P2, p. 14) It was referenced that learning resources focusing on healthy eating are still limited, "Alberta Health Services… (should) create a lesson plan or a PowerPoint and give that to teachers, they would love that." (#P3, p. 11) This lack of resources was associated with the gap in the curriculum. This will be explored in the final sub-category: Lack of Curriculum.

Lack of curriculum. This sub-category was uncovered when discussing existing FSE courses. Junior high FSE courses do not have a curriculum, "Junior high, we haven't really had much of a set curriculum so we would pull bits and pieces from the high school curriculum." (#T2, p. 7) A limitation of this gap is inconsistency amongst classes, "If you talk to a High School teacher, they think there's gaps… people aren't all coming into grade 10 foods with the same skill set because everyone does things differently." (#T3, p. 4) The St. Albert Public School Board attempted to address this, "We… created a localized curriculum… to try to get it a little bit more cohesive." (#T2, p. 8) This process consisted of FSE teachers submitting their course outline to the school board.

A noted benefit of the curriculum gap was freedom in course planning, "It's nice to have a little bit of that freedom to go with what the kids are interested in because they're going to be more engaged." (#T2, p. 7) It also allowed teachers to incorporate a more hands-on approach

which prioritized time in the kitchen, “It’s just easier for my classroom management… have them cooking all the time.” (#T3, p. 17) Teachers also engaged students by creating assignments based on popular TV shows, “I do a competition at the end of the year… Chopped…the kids…look forward to that kind of class.” (#T1, p. 5) Certain teachers acknowledged this approach was different from mentors who had previously taught the course:

> Other teachers that I talked to, it was a lot of, one day we’re doing this worksheet… then the next day we’re practicing the skill in the lab… now… it’s a lot more hands-on from the beginning as opposed… (to) paperwork and worksheets. (#T2, p. 22)

The role of mentorship will be investigated further in the next category: Job Qualifications.

Job Qualifications

This category examined criteria primarily considered by principals when selecting an FSE teacher. Job qualifications had two sub-categories: Teachers’ Passion and Teachers’ Contracts.

Teachers’ passion. This was a key priority for principals when selecting a teacher as a teacher’s passion is associated with engaging students. It is believed enhanced engagement would strengthen learning outcomes, “When teachers are passionate… the kids don’t just do stuff to learn for the marks…they engage themselves… this is what matters most.” (#P1, p. 13) This identified passion aligned with a teacher’s purpose, “Teacher’s job is to create a learning environment…We have all the freedom we want to create that learning environment… the only limit is our creativity.” (#P1, p. 13)

Teachers felt this passion stemmed from personal interest. Most FSE teachers did not have a background in nutrition or healthy eating. Certain participants even admitted their placement in foods was “random”. They all believed their personal interest qualified them to lead

the course, “I’ve always been interested in cooking… I didn’t find it difficult to teach.” (#T3, p. 5) One participant spoke about their personal interest stemming from a son being diagnosed with diabetes, “Our youngest son is diabetic… you’ve got to learn how to eat, count, measure, weigh. I’ve lived that kind of… lifestyle…. I’ve always been interested in healthy eating.” (#T1, p. 3)

Certain principals acknowledged that passion could outweigh a lack of credentials in nutrition or healthy eating, “We would look for credentialing … the most important thing… is someone that… is able to connect and… have their own way of presenting to young people that is meaningful and impactful.” (#P2, p. 9) It would be ideal if FSE teachers had a relevant background. Participants did not consider it a necessity due to potential hiring limitations, “If we have someone that we know isn’t trained, but has a wonderful rapport with kids, which… they actually got the training after the fact…I think it was a big win.” (#P2, p. 10) As mentioned, all principals expected teachers to participate in relevant training after receiving the position. This will be explored in the following sub-category: Teacher Contracts.

Teacher contracts. Teacher contracts emerged as a potential limitation in the initial literature review. This was due to unqualified teachers being able to teach FSE courses. In Alberta, teachers can be hired at any school no matter the position. As stated in *The Alberta Teachers’ Association: Declaration of Rights and Responsibilities for Teachers* (2018b), it is the teacher’s responsibility to admit a lack of competency if it may impede the students’ quality of learning. It was found this system can enable unqualified teachers in leading the course, “Some people who… because they have the full-time contract, we need to fill up their time… can easily be sent to a… foods (class).” (#P1, p. 14) Participants felt it should be the teacher’s responsibility to speak up or simply not apply when unqualified for a position, “It’s important

that teachers are honest about their competency areas and what they feel comfortable teaching." (#P3, p. 10)

A majority of participants supported the current approach of principals assigning teachers to classes, "We have a pretty good system…principal's responsibilities to make sure that people are in a place where they can have success as well, teachers." (#P1, p. 14) It was also agreed that teachers must effectively prepare for their courses; especially if they do not have a relevant background, "As a teacher, you are a professional. You will do your research… you will prep for that course accordingly." (#P3, p. 10) One of the most noted preparation tools was mentorship.

Mentor relationships were developed both formally and informally. One teacher spoke about a mentorship experience at the beginning of their career:

> St Albert Public had a mentorship program where they partner up first year teachers with somebody… who teaches something similar. But being the only foods teacher… they partnered me up with a teacher from another junior high. We… collaborate(d) together and share(d) resources. (#T2, p. 8)

The St. Albert Public School Board mentorship program still exists today. These types of supports were relied on throughout teachers' careers, "We're in a Facebook group…we can give each other ideas." (#T1, p. 7) Although the network is small, it is considered helpful when preparing course activities and selecting recipes. It was also useful in identifying resources which can be limited due to school budgets, the final category.

Budget

Budget allocation was a primary barrier to the implementation of quality FSE courses from the perspective of both teachers and principals. This aligns with findings of previous research conducted by Ronto and colleagues (2017). This barrier was multifaceted in that it

encompassed funding for facility maintenance, purchase of ingredients, and professional development opportunities. These targeted areas subsequently developed into sub-categories which will now be explored.

Facility maintenance. As uncovered by Ronto and colleagues (2017), facility maintenance can be costly for FSE courses, particularly if renovations are required. A number of participants specifically cited the cost of repairing heated appliances such as ovens or stoves, "Ovens are our biggest problems that go on the fritz… we've had to buy a couple new ones." (#P3, p. 7). Principals reflected on needing to budget for facility maintenance years in advance, "We have to plan in the long term, three, four years." (#P1, p. 12) Planning in advance did not ensure availability of funds. One principal spoke about the impact of pressure, "Where the pressure is… is where the funding and resource goes…because the pressure is consistent but not high needs…we can once again table that for next year." (#P2, p. 6) In one case, funding delays led to restricting registered students in the FSE course, "For three years… we haven't been able to really maximize the capacity that are allowed to educate kids (in foods)." (#P2, p. 6) Delays also required teachers to be strategic when selecting recipes, "A blender broke, and I had no money left in my budget… either share blenders or I don't do that recipe." (#T1, p. 10)

The discrepancy in funding for facility maintenance and technology was also revealed, "What do you buy? Stoves for the home-ec lab or more Chromebooks… often…technology wins the allocation of funds." (#P1, p. 11) It was noted stakeholders can hinder funding decisions based on the number of students who will benefit. All principals stressed how crucial it is to be cognizant of disproportional allotment; especially, as funding pots for option courses continue to be restricted, "Care of Technology studies grant…this would cover some additional dollars for… foods… we don't have this anymore, at least for junior high." (#P1, p. 10)

Budget for ingredients. All participating teachers mentioned budgeting for ingredients. Most comments were positive due to administrative support, "Admin has been very supportive of our programming… our budget's gone up a little bit so we definitely got to do more cooking." (#T2, p. 9). The budget for food supplies ranged from $5,000 - $6,000. Although most teachers felt it was sufficient, principals recognized how insignificant it was compared to the total school budget, "$5,000… percentage of our entire budget, that's not a lot." (#P3, p. 3) An interesting finding was the unanimously stated impact of the rising prevalence of dietary restrictions. The meaning differed based on school population. Dietary restrictions included; severe allergies, celiac disease, lactose intolerance, and cultural representation. The most significant concern was the resulting increased cost of ingredients, "Students with severe allergies… a bigger prevalence of that... and… the higher cost of…making recipes for somebody who is celiac… that's definitely played into things." (#T2, p. 12)

Alternatives were provided to engage affected students, "You got all these allergies…. then religious followings too… We're just seeing more and more of it… (I) give them those alternatives." (#T1, p. 9) At times, parents suggested potential substitutions to teachers, "Some parents are super helpful. We had a girl with a lactose issue so we just sent home the recipes and the mom would tell us what we need to just switch or convert." (#T2, p. 12-13) Teachers would adapt recipes for the entire class if a certain food restriction was prevalent, "My population is very heavily Muslim … if we're doing a meat… I just get Halal chicken for the whole class." (#T3, p. 21) Due to rising food costs and dietary restrictions, teachers were hesitant about the future sufficiency of the budget, "It's going to get tighter… especially if we are getting into dietary specialties and religious specialties, that gets expensive" (#T1, p. 10)

All teachers expressed concern over the potential for future budget restrictions, “Funds in general… everything’s getting tighter again… food prices are going up…It’s kind of scary if you ask me.” (#T1, p. 13) Some felt they may have to incorporate more baking recipes due to those ingredients being cheaper, “If your budget is lower, then you probably lean more towards baking because flour and sugar is so cheap.” (#T3, p. 14) It was anticipated budget limitations may also impede professional development opportunities, “Our school’s really great for PD… Next year, will be a little bit less because just the way the government’s changing and things are being shafted.” (#T3, p. 8). This will be examined in the following sub-category.

Professional development. Limited professional development opportunities for FSE was consistently referenced. Teachers expressed frustration over a lack of sessions in their district, “There’s not a lot put out in our District… The one’s I have attended are in Edmonton.” (#T1, p. 7) For those that did exist, the unfeasibility of the sessions content and scheduled time was mentioned. As explained by one teacher, session ideas were often not realistic, “It’d be like, how to bake bread…but how am I going to do this in a 50-minute class? I can’t.” (#T1, p. 7)

As noted, an additional barrier was the scheduled time of the event, “Evening courses… would be wonderful to attend, but I have small children … I just couldn’t make it work with my own personal schedule.” (#T2, p. 6) Attending during work hours was also difficult due to the lack of qualified substitutes, “There’s no subs in this area to properly cover my classes so then I tend not to be away.” (#T1, p. 6) One teacher reflected on only using a specific substitute due to previous negative outcomes, “I try to get the same sub because I have had troubles.” (#T3, p. 8)

In regard to budget, teachers felt it was sufficient but was often allocated to academic sessions, “Typically, a professional development is ran more towards core subjects.” (#T3, p. 7) This effectively limited attendance at FSE specific sessions, “A lot of my PD is involved within

the other aspects of my teaching job. I haven't done a lot… in regard to the foods." (#T2, p. 6) The prioritization of academics was justified due to the small group of FSE teachers, "There's just not a lot of foods teachers and so that's not a main focus within education." (#T2, p. 6) In addition, teachers often split their time between core courses and FSE, "There's very few teachers… who teach just Foods in Junior High. Usually, you teach an option and you're a Science teacher." (#T3, p. 8)

Discussion

This research study found that principals and teachers strongly believe food skills should be taught in school. This section will outline recommendations to enhance the effectiveness of current FSE courses and support the development of additional healthy eating initiatives.

Development of Junior High FSE Course Curriculum

An enduring gap is the lack of curriculum for Junior High FSE courses. This is a concern as evaluation processes for student's quality of learning is limited in the absence of set criteria. Course curricula have also been found to enhance teacher's confidence in subject areas (Hu & Fyfe, 2010) and prevent the sharing of misconceptions (Murphy & Smith, 2012). This recommendation is timely if the provincial government chooses to continue with the curriculum update. Competencies such as Problem Solving and Creativity and Innovation (Alberta Education, 2016) should be targeted when developing the curriculum to allow the incorporation of a more hands-on approach. Previous research has highlighted that youth benefit from hands-on activities (Meehan, Yeh, & Spark, 2008). This also aligns with the priority of participants to ensure students remain engaged and actively learn. In addition, research conducted by Slater (2013) found learning resources are limited without a course curriculum. It is anticipated that the

creation of a curriculum would subsequently result in further learning resources and professional development opportunities.

Enhance Accessibility to Food Literacy Learning Resources

All of the FSE teachers reflected on the limited availability of learning resources and professional development opportunities. This was anticipated due to previous research conducted by Ronto and colleagues (2016a). Developing new healthy eating resources ideally aligns with the release of Canada's updated food guide. Professional development opportunities should highlight the revisions and tailor the lessons for a classroom setting. Further, school board districts should ensure teachers are aware of appropriate training opportunities. This could include strengthening communication amongst districts to share upcoming events with teachers in smaller school boards.

This recommendation may also impact hiring practices. Participants did not think it was feasible to revise hiring qualifications. Specifically, requiring FSE teachers to have a background in nutrition and healthy eating. This was due to concerns it would overly restrict eligible candidates. Particularly, with the already identified decline of qualified teachers due to specialized school closures (Colatruglio and Slater, 2014). The focus should instead be on ensuring teachers partake in appropriate and high-quality training after accepting the position.

Equitable Budget Allocation for Healthy Eating Initiatives

As anticipated, budget was another significant finding. It is a complex barrier due to its impact on a range of areas. Current budget allocation for FSE courses were considered lower, yet sufficient. Most participants expected future funds to be inadequate because of the change in provincial government, rising food prices (Dalhousie University & University of Guelph, 2019), and the removal of option specific funding pots. It is anticipated funding allotted to FSE courses

will be reduced due to the significance of current and upcoming cuts. In 2019, the Alberta Provincial Budget delivered a reduction of $2.9 million to the St. Albert Public School Board (St. Albert Public Schools, 2019). Next year's budget is expected to approximately result in an additional $4.6 million cut (St. Albert Public Schools, 2019). At this time, the specific impact on FSE courses has not been released.

Participants stressed the importance of an equitable approach to funding allocation. When consulting with stakeholders, it is important to consider more than the number of students who will benefit. Other variables must be recognized. As mentioned in the results, an equality perspective often led to more funding being spent on technology. As this funding gap widens, health promotion initiatives and FSE courses may not receive the necessary funds to be effective. This is concerning as certain FSE courses target more vulnerable populations, such as those that teach special needs students life skills. At a minimum, funds should cover the cost of healthy food ingredients to prevent the incorporation of more lower cost recipes, such as baking.

Research Considerations

Strengths. A strength of this study is a pilot interview was conducted with an FSE teacher. This allowed the researcher to make any necessary changes to terminology or question order before the data generation stage (Ronto et al., 2016b). Data from the pilot interview was included in the study. An additional strength was data generation occurred at the end of the school year which allowed more staff to participate due to schedule availability.

Limitations. A limitation was the smaller sample size due to the existence of only four junior high FSE courses in the St. Albert Public School Board district. An additional limitation was only one researcher collected and analyzed the data. Therefore, there was a potential for researcher bias (Ronto et al., 2016b). This was minimized by meeting consistently with the thesis

supervisor. Finally, participation bias may be a limitation as the data was self-reported (Brener, Billy, & Grady, 2003). The FSE teachers and principals may have provided socially desirable responses. This was minimized by incorporating both negative and positive insights into the data.

Future implications. A future implication of this study will be supporting the creation of a junior high FSE course curriculum in Alberta. In terms of health promotion, this study encourages researchers and policy-makers to explore more innovative approaches in promoting healthy eating to youth.

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CHAPTER 6: GENERAL DISCUSSION AND CONCLUSION

"Schools have information technology and visual literacy, but they also need to have food and nutrition literacy."

- *Sandra Fordyce-Voorham, 2011, p. 119*

This research project explored the perceived value of food skills education (FSE) and whether participants believe it contributes to healthy eating. This chapter will begin by reviewing the major findings of the research project. Next, it will highlight unique and sometimes unanticipated findings that emerged from the two research studies. When taken together, collective findings from the two studies revealed a disconnect of opinions between students and staff; the significant influence of academic prioritization; and the rise of youth empowerment. Each of these findings will be discussed in relation to comparable literature. Next, the strengths and limitations of the collective research project are identified. In addition, the anticipated implications for practice, policy, and research is outlined. Knowledge translation recipients and strategies will then be distinguished. Finally, the next steps will be outlined.

Study 1: "Is Learning to Cook Optional?"

A total of 10 grade eight and nine students were interviewed for Study 1: "Is Learning to Cook Optional?". Eight of the students identified as female with the remaining two identifying as male. While the majority of participations had taken at least one FSE course, both males had never enrolled. This sample was reflective of the respective school's gender ratio in FSE course enrollment. Four main categories emerged from the data: Learning; Family; Gender; and Independence.

Learning was significant as it outlined what students believed they learned in a FSE course. Often, these responses influenced students' perceived value of FSE. For instance, if students considered FSE courses to be fun and enjoyable, they were more likely to consider them important. This category also identified what students wished they learned more of in the course which primarily included desire for a greater focus on food safety and plant-based diets.

Gender was another important category due to its identified influence in a modern-day context. It was discovered that gender-based stereotypes remain present amongst youth and can impact the associated value of FSE. Female participants shared their sense of obligation to take a FSE course due in part to gender roles still labelling young females as future caregivers. In comparison, even when interested, males were unlikely to participate in the course. Indirect peer pressure resulted in male students taking more labour-intensive options, such as fit for life or industrial arts. Parents and school staff should work to address this gender influence as it does impact course selection and the subsequent recognition of the value of healthy eating behaviours.

A main recommendation that emerged from Study 1: "Is Learning to Cook Optional?" was the need to split food and fashion into separate courses. In addition, students recommended efforts to promote FSE courses be strengthened and more direct. Both of these recommendations may help address the prominent gender gap some schools experience. Schools should also work to encourage student participation in a more holistic range of both academic and option-based courses. Students identified pressure to enroll in a more academic schedule which included prioritizing certain options such as multimedia studies. As discussed earlier in the thesis, this approach can have repercussions on youths' overall development.

Study 2: "Food Skills; an Academic Course?"

The sample of Study 2: "Food Skills; an Academic Course?" consisted of three junior high principals and three FSE teachers. Four main categories were identified: Promoting Healthy Eating; Curriculum; Job Qualifications; and Budget.

The first category established the clear responsibility school staff feel in promoting healthy eating to youth. This responsibility was enacted through informal methods such as role modeling or establishing formal classroom rules that prohibited the consumption of 'junk food'. Many participants wanted schools to do more to create a healthy eating environment but identified scheduling and budget restrictions as logistical barriers. Therefore, participants could not reach a consensus on whether mandating FSE courses was the most effective course of action.

In regard to Job Qualifications, some school staff acknowledged a struggle to ensure high-quality FSE courses due to a lack of qualified teachers, restricted availability of resources, and lack of funds. At times, teachers with a limited background in food literacy can be selected to lead a FSE course. A teachers' personal interest in FSE was often considered a qualification in lieu of academic certifications. It was clear schools could not adapt hiring practices to place greater emphasis on professional qualifications. This was due to a restricted number of qualified teachers after the closure of specialized institutions and the need for one individual to fill multiple roles. With the lack of qualified professionals, it is important resources are accessible to FSE teachers to allow for the sharing of insight on practical assignments and lesson plans. Another recommendation was the development of a FSE course curriculum at the junior high level. It is anticipated this would strengthen FSE teachers access to additional resources.

Disconnect Between Students and Staff

Students had limited opportunities to share perspectives on FSE course content. Teachers rarely gathered students' thoughts beyond food restrictions and preferences. This disconnect could be addressed with class surveys conducted at the beginning, middle, and end of the course (Young, Joines, Standish, & Gallagher, 2018). Routine surveys could be used to track progress and identify what techniques and strategies are working (Lewis, 2001). Surveys can be tailored to uncover which food skills youth wish to learn to increase their confidence and, subsequently, their ability to cook healthy meals (Lang & Caraher, 2001). They may also strengthen student engagement which can lead to a more positive experience in FSE courses (Lewis, 2001).

Student and staff disconnect is multi-faceted as it relates to perspectives on both course content and gender influence. In regard to course content, Study 1: "Is Learning to Cook Optional?" revealed that students are interested in learning more about food safety. Youth specifically identified discomfort working with heated appliances as a barrier to cooking. This aligns with a similar finding of Amin and colleagues (2018) as a youth participant stated "I can use the microwave…but I can't use the stove because…I could burn myself" (p. 921). Youth believed that if taught how to safely use ovens and stoves, it would enable them to confidently cook more both at home and while babysitting. Surprisingly, teachers were not aware of youth's interest in food safety.

The second area of disconnect between students and staff was the influence of gender. An objective of Study 1: "Is Learning to Cook Optional?" was exploring the impact of gender in a modern-day context due to it being historically significant (Attar, 1990). It was discovered that gender-based stereotypes remain present amongst youth and influence the perceived value of FSE. Some female students felt pressured to participate in FSE courses. In contrast, males

selected more stereotypically male options and often only joined FSE courses when encouraged by a female friend. A majority of students also reflected on a marked gender gap in FSE course enrollment. This was even acknowledged by students who had never participated in a FSE course. Staff were less likely to note the disparity and did not report gender as a factor influencing enrollment. School staff should be aware of its influence and work to address it to equalize course enrollment. Gender equalization initiatives may also prevent the passing down of discernible gender-based stereotypes onto younger generations which can impact course selection.

Impact of Academic Focus

The prioritization of academic courses was expected to be a secondary finding in this research project. Previous research by Hall and colleagues (2016) noted its impact when interviewing high school students on a similar topic. Its significance in this project was unanticipated as it was expected the pressure to partake in more academic courses would not be as evident at the junior high level as it is in high school. Priority of academic courses were reported in both research studies but each study pinpointed different aspects of the priority influence. In Study 1: “Is Learning to Cook Optional?”, students discussed how the scheduling of academic coaching prevented them from enrolling in FSE courses. In Study 2: “Food Skills; an Academic Course”, school staff acknowledged the pressure of allocating further time and resources to core courses. This academic focus should be investigated further as this finding illuminated how a student’s ability to participate in a holistic range of courses can be restricted. Certain school staff adamantly believed such holistic enrollment would provide opportunities for students to excel beyond their academic studies.

Participants felt the academic pressure was trickling down from post-secondary entrance requirements. As applications for post-secondary institutions have become more competitive, high school and now junior high students, have noticed an impact on their course selection. Both studies cited parents as strong supporters of targeting more academic options such as multimedia studies which teaches students about digital literacy. The American Library Association (2013) defines digital literacy as "the ability to use information and community technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (p. 2). Implementing the Whole Child model is one potential means to address the limitations of a solely academic focus (Lewallen et al., 2015). This model integrates health and education with the goal of developing students who are knowledgeable, emotionally and physically healthy, and civically active, amongst other characteristics (Association for Supervision and Curriculum Development (ASCD), 2007). It can effectively prepare students for success in post-secondary and future employment positions (Lewallen et al., 2015). Therefore, key decision makers such as parents and school staff should support the implementation of school-based policies that target the Whole Child Approach (ASCD, 2007).

Rise of Youth Empowerment

It is well-documented that youth will face the most significant risks and uncertainties that arise from climate change (O'Brien, Selboe, and Hayward, 2018). This has led to a rise of youth-led environmental movements that are encouraging political mobilization and lifestyle changes amongst this population group (Manning, 2013; Stitzlein, 2012; Hörschelmann, 2016). These changes directly relate to healthy eating through the increasing promotion, and subsequent prevalence, of plant-based diets (Manning, 2013). The significance of environmentally sustainable food systems was prominent in the systems competency uncovered by Slater and

colleagues (2018). A recommendation that aligned with specific findings from Study 1: "Is Learning to Cook Optional?" is "choosing and preparing foods to support sustainable eating" (Slater et al., 2018, p. 552).

It was made evident in both Study 1: "Is Learning to Cook Optional?" and previous research conducted by Croll and colleagues (2001), that students want to learn more about vegan and vegetarian substitutes. Factors that contribute to this intrigue include: the perception of plant-based diets being "healthier" and more ethical and environmentally conscious (Croll et al., 2001; Manning, 2013). This sense of empowerment may have motivated youth to participate in this research project. It allowed them to voice their perspective on prioritizing certain course content and the need to acknowledge climate change. This should be explored in future research due to the growing prominence of addressing climate change through both formal and informal methods (Manning, 2013; Stitzlein, 2012; Hörschelmann, 2016).

Strengths

This research project had a number of strengths. First, I had a pre-existing, trusting relationship with one of the principals which enhanced the fidelity of the research project (Chervin et al., 2005). This principal acted as a gatekeeper (Mayan, 2009) which helped recruit student participants who were knowledgeable on the topic of FSE. Second, the age of the researcher was a potential strength in Study 1: "Is Learning to Cook Optional?". Previous research conducted by McLaughlin (2006) identified that younger participants are more comfortable sharing information with someone they are closer in age to. This is due to the assumption that common experiences and languages may be shared (McLaughlin, 2006). Third, both research studies incorporated a pilot interview to allow a trial run of the respective interview questions. This led to minor changes being made to the terminology and question order

(Ronto et al., 2016b). Data from the pilot interview for Study 2: “Food Skills; an Academic Course” was included in the analysis due to the response relevance. Data for the pilot interview for Study 1: “Is Learning to Cook Optional?” was not as the test individual was older in age compared to the actual student sample. Finally, the data generation took place during the final weeks of school in June 2019. Scheduling was not a barrier as students had few class requirements remaining. Therefore, in-depth interviews were able to be conducted which may have enhanced the potential for saturation.

Limitations

The first potential limitation is all student participants were recruited from one junior high school. As a result, differing opinions arising from the school environment may not be incorporated. Second, the participating school was located in St. Albert, Alberta which is a community known for its limited diversity and higher socio-economic status (Statistics Canada, 2016). In 2015, the median income was $119,905 and only nine percent of the population identified as a visible minority (Statistics Canada, 2016). Therefore, perspectives based on race and income may be restricted which could reduce the generalizability of the findings. Gender-based opinions may also be reduced as only two males participated in Study 1: “Is Learning to Cook Optional?”. Third, only one data generating strategy could be implemented due to time constraints. This removed the potential for triangulation which can strengthen the results validity (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). A final potential limitation is participation bias. Since the data was self-reported, participants may have provided socially desirable responses (Brener, Billy, & Grady, 2003). This limitation was minimized with the inclusion of both negative and positive insights on the phenomenon in the data.

Implications

This research project culminated in a range of implications that can impact the professions of health promotion and education. For clarity, the implications will be expanded on under the sub-categories of practice, policy, and research.

Practice

The finding that many FSE teachers were not specialists or without food skills training themselves suggests the need for professional development opportunities for FSE teachers. Schools should encourage FSE teachers with a limited background in food to attend as it can enhance the quality of the course (Downs et al., 2012). This is particularly important due to the confirmed unfeasibility of adjusting current hiring practices to require professional certifications in FSE. Developing a network of FSE teachers could enable the sharing of lesson plans and class assignments. This can help teachers select and design resources that are more effective and engaging for students (Ronto et al., 2016b). It can also alleviate any sense of isolation FSE teachers may be experiencing.

This research project also identified recommendations that can be a stepping-stone to creating overall healthy eating environments within schools. This is important as teachers believe initial efforts to strengthen knowledge on healthy eating and FSE specifically, can create a sense of urgency that elicits further change (Knotter, 1996). Future initiatives can also be built upon existing health promotion programs that target development of life-long healthy eating (WHO, 2006). This approach will reduce required resources and align with health promotion practice as it encourages a community-based approach through the involvement of different stakeholders and sectors (WHO, 2006).

Policy

The results of this research project contribute to the on-going discussion of mandating FSE courses. If pursued, Alberta Education would need to adapt the allocation of resources such as class time and curriculum outcomes. Additional policy changes targeting a more equitable distribution of the school budget should also be considered. Some participants reflected on the current distribution of funds in that it prioritized more academic endeavors and could result in FSE courses being neglected. If the funding gap was narrowed, schools may be better able to support further healthy eating initiatives. This could even develop into the implementation of additional evidence-based, health promotion initiatives.

The findings of this research project are also relevant should the Government of Alberta choose to revise the *Alberta Nutrition Guidelines for Children and Youth*. Certain sections of the resource manual are based on the food groups and portion sizes outlined in Canada's previous food guide, including the healthy eating recommendations for school facilities (Government of Alberta, 2012). The development of a FSE course curriculum could furthermore help address the recommendation of "reinforcing healthy eating concepts taught in schools" (Government of Alberta, 2012, p. 7). As of January 2020, the Government of Alberta has not announced an intention to revise the guidelines.

Research

This research project addressed a number of gaps in the literature. For instance, it targeted the youth perspective which previous research specifically identified as limited (Hall et al., 2016; Perikkou et al., 2015). It also provided further insight into the role of principals as champions for healthy eating in schools. The research project also identified future areas of research within the topic of FSE. For example, the role of parents should be explored separately

due to their perceived influence on both students and school staff. Additionally, research should be conducted on gender influence in regard to course selection for younger students (Adamuti-Trache & Sweet, 2013; Hango, 2013). Finally, future research may evaluate the effectiveness of an FSE course curriculum if one were to be implemented in Alberta. If deemed successful, this research could help advocate for FSE curriculum development in other provinces or territories.

Knowledge Translation

The following knowledge translation strategies aligns with the Health Promotion competency of communication. The responsibility of a health promoter, in regard to this competency, is to "communicate health promotion information effectively with diverse audiences using appropriate approaches and technologies." (Health Promotion Canada, 2015, p. 3). It is important that information is tailored to specific audiences. In addition, appropriate communication mediums such as media and presentations should be utilized in a culturally appropriate manner. To correspond with the competency, specific stakeholders and communication strategies have been identified.

Students, Parents, or Guardians

Primary knowledge users of the research project are students and their parents or guardians. A knowledge translation goal of the project was to generate behaviour change amongst youth whether by increasing enrollment in FSE courses or garnering recognition of their potential value. The specific knowledge translation strategy for this audience is sharing the research project's key findings through the provision of the final publication of both studies. I will also advocate for student participation in course curriculum consultation at both the school and provincial level as they are the key recipients of FSE courses.

Teachers and Principals

Teachers and principals were key knowledge users throughout the research process. The knowledge translation goals for this select audience were to impart knowledge and generate behaviour change. The implementation of FSE courses are more successful when teachers have adequate training, resources, and support from the school community (Nanayakkara et al., 2018; Ronto et al., 2016b). Principals can also help address the current barrier of FSE courses not being prioritized as a core subject (Hall, Chai, & Albrecht, 2016). As found in Study 2: "Food Skills; an Academic Course", this lack of prioritization is partially due to budget limitations and scheduling restrictions which principals can help alleviate (Ronto et al., 2017)

Principals and teachers may support advocating for mandatory FSE courses if deemed feasible and logistical barriers can be overcome. Considerable support exists for the creation of further resource materials and professional development opportunities for FSE teachers.

St. Albert Public School Board

The specific knowledge translation goal for the St. Albert Public School Board was to generate policy action with the potential creation of a FSE course curriculum. This partnership is valuable as the feasibility of implementing changes at the provincial level is greater with the support of school boards. Recommendations for curriculum change will be presented at relevant conferences and school board meetings upon request.

City of St. Albert

The City of St. Albert is aware of the research project and has expressed interest in being advised on the key findings. Therefore, a presentation may be scheduled for the St. Albert City

Council and Mayor. The goal of the presentation is to generate awareness on the role school staff and the community at large can play in enhancing youth food literacy.

Another knowledge translation strategy that could be used to generate awareness within the City of St. Albert is social media. After publication, the results may be shared on the City of St. Albert's social media platforms such as Facebook and Twitter. The community newspaper, the St. Albert Gazette, may also be interested in publishing a story identifying potential recommendations. This opportunity for a partnership with media exists as the St. Albert Gazette has recently published several public health stories of a similar nature.

Alberta Ministry of Education

School curricula are a provincial responsibility in Alberta (Government of Alberta, 2018). Therefore, the Alberta Ministry of Education is also a knowledge user (Government of Alberta, 2019). Generating policy action is an appropriate knowledge translation goal of a peer reviewed publication. Peer reviewed material can be beneficial when working with politicians to generate policy change (K. Johnson, personal communication, April 9, 2018). The findings can also contribute to Alberta's education curriculum changes for grade eight and nine should the Government choose to continue with the revision.

Ministry of Health, Government of Canada

The final knowledge user that will be involved at the completion of the research project is the federal Ministry of Health. This ministry is appropriate given the promotion of healthy eating for children and youth being included in the Minister of Health mandate letter (Government of Canada, 2019b). In this instance, the knowledge translation goals are to generate awareness and

policy action which can include supporting the implementation of further healthy eating initiatives targeting youth. The overall arching goals of these multiple knowledge translation strategies is to impart knowledge and generate practice change at numerous stakeholder levels.

Next Steps

The completion of this research project clearly established the need for further research through a health promotion lens. As previously discussed, future research questions should target the specific role of parents and the impact of academic prioritization with respect to course selection. Additional research could also target a younger demographic to see if the perceived value of, and barriers to, FSE opportunities are similar. Identifying such information could enhance the potential effectiveness of future youth-focused, healthy eating initiatives.

This research project also outlined the need for a FSE course curriculum at the junior high level. Developing a curriculum would allow students to contribute to course content and establish consistency amongst schools. Ultimately, a curriculum will also increase the justification for additional professional development opportunities and resource allocation. As of January 2020, the Government of Alberta has not chosen to pursue the provincial curriculum review. As a result, this recommendation may be more feasible at the school board level.

Finally, the Government of Canada should continue to prioritize promoting healthy eating to children and youth. The updated food guide was innovative in that it recognized healthy eating as a broader concept. Further efforts should be made to incorporate this holistic definition into legislation, programs, and awareness campaigns. Promoting healthy eating is a health promotion and public health prerogative that requires a multi-level approach. Working together, stakeholders from a range of professions and contexts can achieve effective and sustainable change.

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Appendix A: Index of Student Demographics

Student #	Colour	Grade	Identified Gender	Enrolled in Food Skills (Y/N)	If Y, how many years?
1	**Red**	8	Female	Y	2 (grade 7/8)
2	**Orange**	9	Female	Y	3
3	**Green**	9	Female	Y	3
4	**Light Blue**	9	Female	Y	1 (grade 8)
5	**Purple**	9	Female	Y	3
6	**Pink**	9	Female	Y	2 (Grade 7/9)
7	**Grey**	9	Female	Y	2 (Grade 7/8)
8	**Black**	9	Male	N	
9	**Dark Blue**	9	Female	Y	1 (Grade 7)
10	**Dark Green**	9	Male	N	

Appendix B: Parent/Guardian Consent Form

To the Parents or Guardians of Grade 8 or 9 Students
Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Is Learning to Cook Optional?

Primary Researcher: Shelby Johnson **E-mail: slj@ualberta.ca**
Phone Number: (780) 995-5844

Thesis Supervisor: Dr. Kim Raine **E-mail: kim.raine@ualberta.ca**
Phone Number: (780) 492-9415

Background

Your child is invited to participate in a research project involving one-on-one interviews, participant reflection, and participant observation. Your child is eligible to participate because they are a grade 8 or 9 student in the St. Albert Public School Board. This study is seeking students who have both taken a food skills class as well as those that have never taken a food skills class.

Purpose

We would like to know more about the value youth associate with food literacy. Youth have innovative perspectives that are rarely heard in research. **The purpose of this research study is to explore the opinions of junior high students regarding food skills education's contribution to their lifelong healthy eating behaviors.** These findings are important as they may be used as recommendations for the on-going curriculum update in Alberta.

Study Procedures

Participation in this research study involves three steps:

1. First, your student will be asked to participate in a one-on-one interview with the researcher. The interview will take place in the school and will be the length of one-school block, approximately 45 minutes. The interview will focus on what they believe they can learn in a food skills education class and their understanding of food literacy.
2. Second, the student will be provided with an opportunity to reflect on the questions and submit input privately. The reflection can be typed up and e-mailed to the researcher at the above address. It will be required that the participant submit any further insight they may have within one week of completing the interview.

3. Third, the researcher will be observing a food skills education class. If your child is enrolled in the course, they may be present while the observation occurs. The researcher will be acting solely as an observer. Please let the researcher know if you have any concerns regarding the class observation.

Benefits

It is important to incorporate the youth perspective into this research study as it is anticipated the findings may be used as recommendations for the on-going curriculum update in Alberta. This study may also allow researchers and policy-makers to explore more innovative approaches in enhancing healthy eating. In addition, participants may feel as if they have indirectly benefited by contributing to the research and creating a possible direct benefit for others in the future.

Risks

There are no known risks associated with participating in this research study. There is a potential that student responses may incorporate a focus on gender, family, and school dynamics. Emotional triggers have been considered when selecting terminology for questions and probes. The wording has also been reviewed by the University of Alberta Research Ethics Board. If a student does become emotionally distressed during the interview, the researcher will immediately stop asking questions. The school protocol for when a student is distressed will be followed. The parent or guardian will be notified if the researcher is required to stop the interview due to the student becoming distressed.

Voluntary Participation

Participating in this study is completely voluntary. Once parental consent has been given, the student will be asked to review and complete an assent form. Even if the parent or guardian provides consent, the student can choose to not participate. No negative effects will occur if your child chooses not to participate in the research study. Interviews will be audio recorded and it will be made clear that the student can end the interview at any time. Your child's information can be removed from the study within two weeks of data generation if you and/or your child decide later they do not want to participate. If you or your child would like to withdraw from the research study, please contact Shelby Johnson by e-mail or phone. Dr. Kim Raine may also be contacted by e-mail or phone.

Confidentiality and Anonymity

Your child's privacy will be ensured throughout the research process. A pseudonym will be used for the audio transcriptions and in any written publications. Their participation in the study along with any information provided during the interview will never be shared with any other external

individual. All information will be kept in a locked cabinet at the University of Alberta and on a password protected hard drive. Only the primary researcher and their supervisor will have access to the information. Sensitive data including transcripts or identifying information will be destroyed five years after the publication of the thesis.

Further Information

If you have any further questions regarding this study, please do not hesitate to contact Shelby Johnson: slj@ualberta.ca, (780) 995-5844 or Dr. Kim Raine: kim.raine@ualberta.ca, (780) 492-9415.

The plans for this research study have been reviewed for adherence to ethical guidelines. If you have any questions about your rights as a study participant, please contact the University of Alberta Research Ethics Board at 780-492-2615.

Consent Statement
I have read this form where the research study has been explained to me. I have been given the opportunity to ask questions and if I had questions, my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to allow my child to participate in the research study described above.

_____ _____
Signature of Student's Parent or Legal Guardian Date

_____
Printed Name

Interest in Research Findings
If you are interested in receiving further information on the final research findings please provide your information below.

Email Address: _____

Phone Number: _____

Appendix C: Assent Form

To the Grade 8 or 9 student in the St. Albert Public School District

Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Is Learning to Cook Optional?

Primary Researcher: Shelby Johnson **E-mail: slj@ualberta.ca**
Phone Number: (780) 995-5844

Thesis Supervisor: Dr. Kim Raine **E-mail: kim.raine@ualberta.ca**
Phone Number: (780) 492-9415

We would like to begin by telling you about the research study we are doing. Research is a process in which we learn more about something that we did not know before. You are being asked to join the study because you are a grade 8 or 9 student in a Junior High in the St. Albert Public School Board district. This study is looking for students who have both taken a food skills class as well as those that have never taken a food skills class.

If you agree to join this study, you will have an interview with the primary researcher on your thoughts on food skills education and have the opportunity to privately write them down. We are particularly interested in whether you believe food skills education is linked to healthy eating behavior.

You should never feel uncomfortable when participating in this study. We will immediately stop the interview if you ever feel distressed or unhappy. Your answers will always remain between you and myself, the primary researcher. I will never share with your teacher, parents, or classmates what we talked about.

You are not required to join this study. It is completely your decision. You can choose to not participate in the study even if your parents or guardians give their consent. If you start the study and later decide you do not want to participate, you can stop. You just need to let the primary researcher or their thesis supervisor know either by sending an e-mail or phoning them (contact information above). No one will be upset if you change your mind about being involved after the study has begun. You have up to two weeks to stop being a part of the research study.

Before you say **yes** or **no** to participating in the study, we would like to answer any questions that you may have. If you do join the study, you will be able to ask questions at any time. If you have any questions about this study, or your involvement, please feel free to contact Shelby Johnson slj@ualberta.ca, (780) 995-5844 or Dr. Kim Raine: kim.raine@ualberta.ca, (780) 492-9415.

☐ Yes, I will be in this research study. ☐ No, I do not want to do this.

Student's name		Date
Person obtaining Assent	Signature	Date

Appendix D: Index of Principal and Teacher Demographics

#	Colour	Position	Years in Position	Background in Foods	Gender
T1	**Yellow**	Food Skills Teacher	20	Some nutrition courses; diabetic son	Female
T2	**Red**	Food Skills Teacher	6 as teacher (12 in total)	Human Ecology Degree/Relevant Student Placement	Female
T3	**Green**	Food Skills Teacher	3	No	Female
P1	**Blue**	Principal	11 as principal (30 total)	No	Male
P2	**Purple**	Principal	12 as principal (25 total)	No	Male
P3	**Black**	Principal	5 months (14 years total)	Some in phys. ed	Female

Appendix E: Junior High Principal Consent Form

To the Junior High Principal in the St. Albert Public School Board
Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Food Skills, an Academic Course?

Primary Researcher: Shelby Johnson **E-mail: slj@ualberta.ca**
Phone Number: (780) 995-5844

Thesis Supervisor: Dr. Kim Raine **E-mail: kim.raine@ualberta.ca**
Phone Number: (780) 492-9415

Background

You are invited to participate in a research project involving one-on-one interviews and participant reflections. You are eligible to participate because you are a junior high principal in the St. Albert Public School Board. In addition, your school currently offers a food skills education class.

Purpose

We would like to know more about junior high principals understanding of food skills education and their perceived role in enhancing youth's food literacy levels as well as healthy dietary behaviors. Principals play a vital role within the school community. Therefore, it is important their perspective is included in the study. **The purpose of this research study is to explore the opinions of junior high principals regarding food skills education's contribution to lifelong healthy eating behaviors.** These findings are important as they may be used as recommendations for the on-going curriculum update in Alberta.

Study Procedures

Participation in this research study involves two steps:

1. First, you will be asked to participate in a one-on-one interview with the researcher. The interview will take place in the school and will be the length of two-school blocks, approximately 90 minutes. The interview will focus on your background, your understanding of food literacy, and budget allocation for the food skills education class.
2. Second, you will be provided with an opportunity to reflect on the questions and submit input privately. The reflection can be typed up and e-mailed to the researcher at the above address. It will be required that the participant submit any further insight they may have within one week of completing the interview.

Benefits

This study may also allow researchers and policy-makers to explore more innovative approaches in enhancing healthy eating. In addition, participants may feel as if they have indirectly benefited by contributing to the research and creating a possible direct benefit for others in the future.

Risks

There are no known risks associated with participating in this research study. There is a potential that interview responses may incorporate a focus on personal values and school dynamics. Emotional triggers have been considered when selecting terminology for questions and probes. The wording has also been reviewed by the University of Alberta Research Ethics Board. If a participant does become emotionally distressed during the interview, the researcher will immediately stop asking questions.

Voluntary Participation

Participating in this study is completely voluntary. Participation will be confirmed upon reviewing and signing the consent form. No negative effects will occur if you choose not to participate in the research study. Interviews will be audio recorded and it will be made clear that you can end the interview at any time. Your information can be removed from the study within two weeks of data generation if you decide later you no longer want to participate. If you would like to withdraw from the research study, please contact Shelby Johnson by e-mail or phone. You may also contact Dr. Kim Raine by e-mail or phone.

Confidentiality and Anonymity

Your privacy will be ensured throughout the research process. A pseudonym will be used for the audio transcriptions and in any written publications. Your participation in the study along with any information provided during the interview will never be shared with any other external individual. All information will be kept in a locked cabinet at the University of Alberta and on a password protected hard drive. Only the primary researcher and their supervisor will have access to the information. Sensitive data including transcripts or identifying information will be destroyed five years after the publication of the thesis.

Further Information

If you have any further questions regarding this study, please do not hesitate to contact Shelby Johnson: slj@ualberta.ca, (780) 995-5844 or Dr. Kim Raine: kim.raine@ualberta.ca, (780) 492-9415.

The plans for this research study have been reviewed for adherence to ethical guidelines. If you have any questions about your rights as a study participant, please contact the University of Alberta Research Ethics Board at 780-492-2615.

Consent Statement

I have read this form where the research study has been explained to me. I have been given the opportunity to ask questions and if I had questions, my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above.

_____ _____

Signature of Participant Date

_____

Printed Name

Interest in Research Findings

If you are interested in receiving further information on the final research findings please provide your information below.

Email Address: _____

Phone Number: _____

Appendix F: Food Skills Education Teacher Consent Form

To the Junior High Food Skills Education Teacher in the St. Albert Public School Board
Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Food Skills, an Academic Course?

Primary Researcher: Shelby Johnson **E-mail: slj@ualberta.ca**
Phone Number: (780) 995-5844

Thesis Supervisor: Dr. Kim Raine **E-mail: kim.raine@ualberta.ca**
Phone Number: (780) 492-9415

Background

You are invited to participate in a research project involving one-on-one interviews and participant reflections. You are eligible to participate because you are a junior high food skills education teacher in the St. Albert Public School Board.

Purpose

We would like to know more about junior high food skills education teachers understanding of food skills education and their perceived role in enhancing youth's food literacy levels and healthy dietary behaviors. Teachers play a vital role within the school community. Therefore, it is important their perspective is included in the study. **The purpose of this research study is to explore the opinions of junior high food skills education teachers regarding food skills education's contribution to lifelong healthy eating behaviors.** These findings are important as they may be used as recommendations for the on-going curriculum update in Alberta.

Study Procedures

Participation in this research study involves three steps:

1. First, you will be asked to participate in a one-on-one interview with the researcher. The interview will take place in the school and will be the length of two-school blocks, approximately 90 minutes. The interview will focus on your background, your understanding of food literacy, and your perceived role in enhancing youth's food literacy levels and healthy dietary behaviors.
2. Second, you will be provided with an opportunity to reflect on the questions and submit input privately. The reflection can be typed up and e-mailed to the researcher at the above address. It will be required that the participant submit any further insight they may have within one week of completing the interview.
3. Third, the researcher will be observing one of your food skills education class. The researcher will be acting solely as an observer.

Benefits

This study may also allow researchers and policy-makers to explore more innovative approaches in enhancing healthy eating. In addition, participants may feel as if they have indirectly benefited by contributing to the research and creating a possible direct benefit for others in the future.

Risks

There are no known risks associated with participating in this research study. There is a potential that interview responses may incorporate a focus on personal values and school dynamics. Emotional triggers have been considered when selecting terminology for questions and probes. The wording has also been reviewed by the University of Alberta Research Ethics Board. If a participant does become emotionally distressed during the interview, the researcher will immediately stop asking questions.

Voluntary Participation

Participating in this study is completely voluntary. Participation will be confirmed upon reviewing and signing the consent form. No negative effects will occur if you choose not to participate in the research study. Interviews will be audio recorded and it will be made clear that you can end the interview at any time. Your information can be removed from the study within two weeks of data generation if you decide later you no longer want to participate. If you would like to withdraw from the research study, please contact Shelby Johnson by e-mail or phone. You may also contact Dr. Kim Raine by e-mail or phone.

Confidentiality and Anonymity

Your privacy will be ensured throughout the research process. A pseudonym will be used for the audio transcriptions and in any written publications. Your participation in the study along with any information provided during the interview will never be shared with any other external individual. All information will be kept in a locked cabinet at the University of Alberta and on a password protected hard drive. Only the primary researcher and their supervisor will have access to the information. Sensitive data including transcripts or identifying information will be destroyed five years after the publication of the thesis.

Further Information

If you have any further questions regarding this study, please do not hesitate to contact Shelby Johnson: slj@ualberta.ca, (780) 995-5844 or Dr. Kim Raine: kim.raine@ualberta.ca, (780) 492-9415.

The plans for this research study have been reviewed for adherence to ethical guidelines. If you have any questions about your rights as a study participant, please contact the University of Alberta Research Ethics Board at 780-492-2615.

Consent Statement

I have read this form where the research study has been explained to me. I have been given the opportunity to ask questions and if I had questions, my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above.

_____ _____

Signature of Participant Date

_____

Printed Name

Interest in Research Findings

If you are interested in receiving further information on the final research findings please provide your information below.

Email Address: _____

Phone Number: _____

Appendix G: Interview Guide for Students

Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Is Learning to Cook Optional?

Research Question:

What values do junior high students in St. Albert, Alberta, attribute to food skills education?

Introduction:

Hello. Thank you for taking the time to participate in this interview. The purpose of this study is to explore the perceptions junior high students have regarding food skills education's contributions to lifelong healthy eating behaviours.

I have decided to focus on this specific research topic as learning to cook may be a contributor to enhancing healthy eating. This statement is supported by the inclusion of cooking in the recently released Canada's food guide.

Over the course of this interview I will ask you a range of questions focusing on what your thoughts were when you made the decision to take the food skills education class or not. Please take your time to think the questions through. I am happy to clarify a question if need be.
I would like to confirm that you are comfortable with me recording this session. I will be recording through two different ways: a tape recorder and I will be taking a few notes. Is this something you are comfortable with?

I would also like to let you know that I will at times be looking at my phone but this is just so I can check the time.

Questions for if they have enrolled in a food skills education course:

1) **What grade are you in?**
2) **With which gender to you identify?**
    a. **Girl**
    b. **Boy**
    c. **Prefer not to answer**
3) **How many foods classes (the term used at the school) have you taken in junior high?**
4) **Had you taken a foods class before signing up for the one at school?**
5) **What do you learn in the foods class?**
6) **Did you talk to anyone about the foods class before you signed up? Who were those people?**
7) **Did you think about those talks when you decided to join the foods class?**
8) **What else did you think about when you decided to join the foods class?**
9) **Are you planning on taking another foods class? Why?**
10) **Do you have any suggestions on what should be changed with the foods class?**

Questions if not enrolled in a food skills education course:

1) **What grade are you in?**
2) **To which gender identity do you most identify?**

   a. **Female**
   b. **Male**
   c. **Prefer not to answer**

3) **Have you ever taken a foods class before?**
4) **What do you think you learn in a foods class?**
5) **What stopped you from taking a foods class?**
   a. **Potential probes: conflict with your schedule, peer involvement, etc.**
6) **Did you talk to anyone when you were making your decision? Who were those people?**
7) **What are some other reasons that helped you decide not to take the foods class?**
8) **What could we change about the foods class that would make you think about taking it?**

Concluding Statements:

Thank you very much for providing your time and insight! Just a brief reminder that your answers will stay confidential and be treated with the upmost respect and care.

Appendix H: Interview Guide for Junior High Principals

Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Food Skills, an Academic Course?

Research Question:

What values do junior high principals and food science teachers in St. Albert, Alberta attribute to food skills education?

Introduction:

Hello. Thank you for taking the time to participate in this interview. The purpose of this study is to explore the perceptions junior high principals have regarding food skills education's contributions to students lifelong healthy eating behaviours.

I have decided to focus on this specific topic as research shows that learning to cook may be a contributor to healthy eating. This statement is supported by the inclusion of cooking in the recently released Canada's food guide.

This interview will focus on budget allocation for the food skills education course and what role you believe staff play in your students overall healthy dietary behaviours. Please take your time to think the questions through. I am happy to clarify any question if need be.

Before we begin, I would like to confirm that you are comfortable with me taking notes throughout this interview as well as tape recording it. Is this something you are comfortable with?

I would also like to let you know that I will at times be looking at my phone. This is merely to check the time.

1) **How long have you been a principal in the St. Albert Public School Board district?**
2) **How many years have you been a principal?**
3) **During your experience as a teacher did you ever teach a food skills education course?**
    a. **If no: Have you had any exposure to food skills education courses?**

I would now like to focus on budget allocation in regards to the food skills education courses.

4) **In this school year, what percentage of the budget has been allocated to the food skills education courses?**
5) **Has this been a fairly stable percentage of your budget over the last 5 years?**
    a. **If no: How has it changed?**
6) **Do you believe that budget allocation is sufficient for the implementation of the food skills education course?**
    a. **If no: Why?**

I would also like to take some time to focus on other factors that have been identified by administration when discussing food skills education courses.

7) **Do you face any challenges in maintaining the physical facilities needed for the food skills education class?**

   a. **If yes: How do you address those challenges?**

8) **When hiring a food skills education teacher, what criteria do you look for?**
9) **Do you consider whether the candidate has a background in healthy dietary behaviours when filling the position?**
10) **Do you believe it should be mandatory for food skills education teachers to have a background in healthy dietary behaviours?**
    a. **If no: Why?**

I would like to switch gears for a little bit and focus on the concept of food literacy.

11) **Are you familiar with the concept of food literacy?**
    a. **If yes: How would you define food literacy?**
    b. **If no: What do you think the term food literacy suggests?**

I would like to conclude this interview by focusing on your potential role in students overall healthy dietary behaviours.

12) **Do you think you play a role in students overall healthy dietary behaviours?**
13) **If yes: Do you believe the school community shares this belief?**
    a. **If not: Why?**
14) **Do you think your community at large shares this belief?**

Concluding Statements:

Thank you very much for providing your time and insight! Just a brief reminder that your answers will stay confidential and be treated with the upmost respect and care.

Appendix I: Interview Guide for Junior High Food Skills Education Teachers

Title of Research Project: Food for Thought: A Qualitative Study Exploring Food Skills Education as a Determinant of Health Eating

Title of Research Study: Food Skills, an Academic Course?

Research Question:

What values do junior high principals and food science teachers in St. Albert, Alberta attribute to food skills education?

Introduction:

Hello. Thank you for taking the time to participate in this interview. The purpose of this study is to explore the perceptions food skills education teachers have regarding food skills education's contributions to students lifelong healthy eating behaviours.

I have decided to focus on this specific topic as research shows that learning to cook may be a contributor to enhancing healthy eating. This statement is supported by the inclusion of cooking in the recently released Canada's food guide.

This interview will focus on your experience as a food skills education teacher and what role you believe you play in your students overall healthy dietary behaviours. Please take your time to think the questions through. I am happy to clarify any question if need be.

Before we begin, I would like to confirm that you are comfortable with me taking notes throughout this interview as well as tape recording it. Is this something you are comfortable with?

I would also like to let you know that I will at times be looking at my phone. This is merely to check the time.

1) **How long have you been a teacher in the St. Albert Public School Board district?**
2) **How many years have you taught food skills education courses?**
3) **Can you specify the food skills education courses you are currently teaching?**
    a. **What portion does this represent of your total teaching time?**
4) **What professional training, or work experience, did you have in preparation for this teaching assignment?**
    a. **Did any of your professional training, or academic coursework, focus on healthy dietary behaviours?**
5) **What do you think are the core components of a food skills education class?**
6) **What do you think should be the core components of a food skills education class?**

I'd like to take a moment to talk a bit about considerations you have when planning the course outline.

7) **Can you identify any constraints or expectations from administration that have influenced the planning of your course outline?**
8) **Can you identify any specific supports made available by administration that has influenced your planning?**

9) **Can you identify any constraints or expectations from parents or guardians that have influenced the planning of your course outline?**
10) **Can you identify any specific supports made available by parents or guardians that has influenced your planning?**
11) **Can you identify any constraints or expectations from students that have influenced the planning of your course outline?**
12) **Can you identify any specific supports made available by students that has influenced your planning?**

I would like to switch gears for a little bit and focus on the concept of food literacy.

13) **Are you familiar with the concept of food literacy?**
    a. **If yes: How would you define food literacy?**
    b. **If no: What do you think the term food literacy suggests?**

I would like to conclude this interview by focusing on your potential role in students overall healthy dietary behaviours.

14) **Do you think you play a role in students overall healthy dietary behaviours?**
15) **If yes: Do you believe the school community shares this belief?**
    a. **If not: Why?**
16) **Do you think your community at large shares this belief?**

Concluding Statements:

Thank you very much for providing your time and insight! Just a brief reminder that your answers will stay confidential and will be treated with the upmost respect and care.

Appendix J: Example of Data Analysis Table

Initial Coding for Student #9

Mom		
Quotes	**Research Questions**	**Potential Subcategories**
• "My mom a little bit but then I kind of figured it out online." (#9, p. 1) • "The first thing I made I was, I think six, and **I made it for my mom and I was really into making her breakfast in bed** or something like that and I'd make her this nasty like, I'd take different things that I liked but didn't go together. So, I'd make her a yoghurt parfait with dried oatmeal packets and then I'd add a sugar cube on top and then put water or something. And she hated it and **then she kind of taught me a little bit but then gave up on me.** So, when I was old enough I would look online for information." (#9, p. 2) • " My mom taught me mostly family recipes and stuff like that. So we have a family crepe recipe. We have banana bread, cookies, stuff like that." (#9, p. 2) • "She helped me a little bit but obviously I was a pretty young. I was at a young age where I was kind of like, I don't know. I took things that I thought would go really good together even though they didn't and **then she'd taste it and fake being "Umm so good!"** But it actually wasn't." (#9, p. 2) • "**My mom would never buy any sweets for the house.** She wasn't really into that stuff. She'd buy healthy food and stuff. Obviously, as a little kid I would be like "I want cookies!" or something and my mom refused to make them. So, I kind of grabbed her iPad and then searched up cookie recipe and I would take all the ingredients and make them." (#9, p. 3) • "My mom would like, not like, super healthy but more yoghurt, fruit and **she wouldn't get those granola bars that you can get that are chocolate covered. She would get the ones that are covered in yoghurt or something.** Just that kind of healthy alternative snack." (#9, p. 3) • "**My mom has always been the kind of person where it's just like, make your own decisions.** She's never really made decisions for me when it comes to what I want to do for sports and stuff like that. I got to pick what sport I wanted to do and she just told me if you want to do it, you can do it. If you don't like it, we'll just drop out so I can try different things. So, I kind of wanted to do foods and fashion because I had already been into baking and cooking at home." (#9, p. 7) • "**My mom was completely supportive about me wanting to try other, different things.** Just kind of good to know different stuff." (#9, p. 7)	Were you exposed to cooking at home? What prompted you to teach yourself through media? How would you define healthy?	Relationship with Mom Mom's Role

Appendix K: Example of Summary for Subcategory

Subcategories	Relevant Quotes
Mom: Almost every student admitted that the person who first taught them how to cook was their mom. Some of the students even explained how cooking and baking with their mom was a large part of their relationship. This was though their ability to spend time together but in that they could also share memories by talking about what they both had learned in food skills courses. It was also referenced by two students that they were cooking more often at home because their mom's were working more and needed to share the load. Mom's came up often as those who were responsible for grocery shopping and introducing healthy alternatives in meal's.	• "I took a babysitting course and we learned how to properly use the stove and stuff. But, **my mother has also taught me a lot about that**." (#10, p. 2) • **"My mom is normally working a lot so I have to make dinner most of the time."** (#10, p. 2) • "I can BBQ pretty well. I guess that's good. Yeah, I mean, **I make whatever my mom tells me to and normally she say's it's good but I don't know if that's just because I made it and I'm her son**." (#10, p. 2) • "She probably thinks sewing and learning all the skills that the food class teaches you would be a **good thing for me to learn. And then she wouldn't have to teach me as much stuff at home**." (#10, p. 4) • "**I think I didn't take it only because I knew a lot. My mom had already been teaching me how to cook.** So, if someone doesn't know how to cook they should definitely take it into consideration for taking it." (#10, p. 9) • "The first thing I made I was, I think six, and **I made it for my mom and I was really into making her breakfast in bed** or something like that and I'd make her this nasty like, I'd take different things that I liked but didn't go together. So, I'd make her a yoghurt parfait with dried oatmeal packets and then I'd add a sugar cube on top and then put water or something. And she hated it and **then she kind of taught me a little bit but then gave up on me.** So, when I was old enough I would look online for information." (#9, p. 2) • "She helped me a little bit but obviously I was a pretty young. I was at a young age where I was kind of like, I don't know. I took things that I thought would go really good together even though they didn't and **then she'd taste it and fake being "Umm so good!"** But it actually wasn't." (#9, p. 2) • "**My mom would never buy any sweets for the house.** She wasn't really into that stuff. She'd buy healthy food and stuff. Obviously, as a little kid I would be like "I want cookies!" or something and my mom refused to make them. So, I kind of grabbed her iPad and then searched up cookie recipe and I would take all the ingredients and make them." (#9, p. 3) • "My mom would like, not like, super healthy but more yoghurt, fruit and **she wouldn't get those granola bars that you can get that are chocolate covered. She would get the ones that are covered in yoghurt or something.** Just that kind of healthy alternative snack." (#9, p. 3) • "**My mom has taught me how to cook some basic things** so that I can feed myself when I'm home alone." (#8, p. 1) • " My mom was kind of confused because I liked taking it in grade seven and it was, you know, your three basic meals of the day. Lunch, breakfast, and dinner. So, **she was kind of confused why I**

	didn't take it so I could learn how to make more things for myself. Like, for my lunch and breakfast." (#6, p. 8) • " **I've talked to my mom about it and she really liked foods when she did it.** She did it all through high school and she said it was really fun. And, we just kind of talked about it together and shared the experiences." (#6, p. 9) • "**It's usually my mom who makes dinner**." (#5, p. 2) • "My family is very good with cooking. My mom… I have three siblings so **my mom cooked a lot growing up** and so did my grandparents. So, I've always helped cook." (#4, p. 1) • "**I've always baked with my mom** and stuff and we've always, she's always very good at baking birthday cakes and like, making the themes for them." (#4, p. 1) • "I just wanted to make my family happy because **my mom always cooks**. So I wanted to learn how to cook." (#3, p. 1) • "My mom. **She was always in the kitchen**. She loved baking so I learned a lot from her." (#1, p. 2) • "Yeah, my dad. He's like, it's fun, because this year he is learning how to cook to because **my mom works a little** more." (#3, p. 2)