CHAPTER I

INTRODUCTION

1.1. Background

Reaching the age of adolescence, Generation Z needs to have sufficient nutrients to grow perfectly (Ocviyanti, 2015). In fact, there are still many generations of Z who do not have adequate nutrition (Nirmala, 2017). Balanced nutrition can have a positive impact on both their physiological and psychological development. Academic success in school and character development are also strongly influenced by the nutritional adequacy in their age (Blum, Resnick, Dixon, Story, & Neumark, 1997). Children who have sufficient nutrition are more likely to achieve higher in both social and academic life than those who does not have sufficient nutrition intake (Taras, 2005). Balanced Nutrition can be obtained through good choices of food consumption. Generation Z consumes 35% of their daily food intake at school without direct parental supervision (Briefel & Gleason, 2009). If the choice of food they consume at school is not appropriate, it will adversely affect the long-term health conditions. Children should be wise in choosing their own food choice.

There are many ways that Gen Z can adapt Wiseness in Food Choice. Having knowledge about nutrition can help a person understand what is good and what is not for their wellness. But, research has shown that when dealing with children, active cooking experiences combined with nutrition knowledge instead of solely theoretical nutrition knowledge is more effective in changing dietary

1

behavior. (Caraher, Dixon, Lang, & Carr Hill, 1999) (Liquori, Koch, Contento, & Castle, 1998).

The knowledge and experience in understanding of food choice and nutrition can be obtained through the mastery of cooking skills (A, Bell, Adamson, & Moynihan, (2002). There are a few ways to deliver cooking skills. Mothers and cooking classes are the most important sources to acquire cooking skills (Caraher, Dixon, Lang, & Carr Hill, 1999). Conducting cooking classes using Active Learning Method (ALM) are proven to have more impact toward the student's development of cooking skills and is linked to the improvement of their food choice (Levy, J. and Auld, G. (2004). Having proven to be effective in the field of formal education such as health and engineering, Active Learning has also been proven to be effective in delivering non formal education such as cooking skills. Being different from the more traditional approach of learning (Passive Learning), Active Learning Method require students to be in the spotlight/student centric. Students are insisted to be actively engaged instead of passively learning (King, A., 1993) while the teacher gives the lecture in front of the class. In the context of cooking classes, active learning method can be incorporated by letting the students engage through a 'hands on' approach. The research that was conducted by Focus on Food: Development of the Cooking with Kids Experiential Nutrition Education Curriculum Lynn M. Walters, MS; Jane E. Stacey, BS suggested that those who attend cooking classes that adopts the ALM are more likely to retain the healthy behavior and are proven to experience beneficial health condition such as weight loss and stable level of cholesterol and blood sugar. Hands on experience with food is an engaging and effective strategy to teach healthful eating behaviors (Walters,

& Stacey, 2009). Having sufficient knowledge and understanding towards healthy food choice and nutrition are proven to be beneficial to one's long term health related choices and behavior (Ternier, 2010)

Being healthy and to have balanced nutrition is also closely linked to student's academic achievement (Neumark-Sztainer, Story, Dixon, Resnick, & Blum, (1997). One of the concept that can also predict academic achievement and many other successes in life is Self-Efficacy. (Bandura, 1986) defined Self Efficacy as "People's judgements of their capabilities to organize and execute courses of action required to attain designated types of performances". Because of the significance of effect that Self Efficacy brings to the shaping of success, in determining the recipe for success, numbers of psychologist put the factor of selfefficacy above the factor of talent (Akhtar, 2008). In a school setting, students who possess a feeling of confidence in his or her skills will engage deeper in processing the lecture that is being given during learning process which then leads to a better understanding towards the material (Mayer, 2008). ALM endorsed Cooking Classes incorporate Discussion Group, Practice by Doing, and Teach Others all at the same time. Through using those kind of approach, it promotes the mastery of content (Bonwell, 1991) which is the core source of Self-Efficacy. Mastery experience provide the biggest impact to the building of one's self efficacy (Bandura, 1986). Successfully completing a task will raise one's self efficacy on the matter. Overcoming obstacles through persistence and effort will grant a person with a resilient sense of efficacy. The second source of Self-Efficacy is through vicarious experiences. Vicarious Experience comes from observing the people around us, seeing people that we consider are similar to us, increases our belief towards our

ability in mastering the skills that are required to finish that task (Bandura, 1986). ALM supports students to work together and share ideas. In that process, students are able to observe each other and gain the Vicarious Experience. In having a healthy and accurate level of self-efficacy, students will also have a tendency to be more engaged and active in classroom therefore resulting in a better academic result (Linnenbrink, & Pintrich, 2003).

The other important variable in the development of character building in adolescence is Self Esteem. Evidently through research conducted by Radenbach in 1991, Self Esteem has an important role towards the formation of adolescent character, social life, and their academic success. Born as digital natives, the generation is exposed to the internet and social media from such an early age. Gen *Z* needs to be equipped with high Self Esteem to be able to cope with the possibility of self-esteem threatening impulses that they can find on the internet. The development of self-esteem is considered as one of the most important developmental processes of adolescence (Sirin and Rogers-Sirin, 2004). Having a healthy body, self-esteem, and self-efficacy is important not only for their adolescence years but also in the future.

The research will test the difference between the group who is exposed to the ALM intervention and the group who are exposed to the Passive Learning Method in the context of their Food Choice Wiseness, Self Esteem, and their Self Efficacy.

1.2. Research Problem

This research is inspired by the previous research written by Joshua Levy,

MS and Garry Auld, PhD, RD titled "Cooking Classes Outperform Cooking Demonstrations for College Sophomores" which examine the best learning method to influence college sophomore's dietary behavior through cooking skills delivery. This research will adapt the experimental research method that is being used in Levy's research. Levy's research suggests that the intervention group experienced more statistically significant gains in attitudes and appeared to have a better pattern of gains in cooking- related knowledge and behaviors.

Previous research by Scott Freeman (2013) found that Active learning increases student performance in the context of science, engineering, and mathematics. The result of his research suggest that student performance increased when are exposed with active learning compared with lecturing. Freeman revealed that students who participate in the typical course (passive learning) owning a possibility of 1.5 times of failures compare to students who discover their learning through active learning classes. Tatang Muttaqin also researched about active learning and cooperative learning using student samples from a primary school in Australia. Muttaqin concluded that there is a positive effect on student's self esteem that was caused by the exposure of cooperative learning.

The effect of Active Learning is also assessed in Chan Yuen Fook et al's (2015) research towards Self Efficacy among students in higher education. Fook proved that in a higher education setting, Active Learning also has a positive influence towards the student's Self Efficacy. Effectivity of Active Learning method, which might come in the form of hands-on cooking classes plus nutrition-related understanding, was proven to enhance better dietary behavior rather than

merely a theoretical comprehension. The fact was stated by Carahar et al. (1999) in their opus: The British Food Journal.

Despite the potentials and previous successful studies in Active Learning towards health behavior and self-concepts in students from various locations, limited research is found using Indonesian students as samples. This research will use actual Indonesian seventh grade students that is a part of the Generation Z cohort as the samples.

Therefore, this study will address the question of whether certain learning method (active vs. passive) would lead to wiser food choice, better self efficacy, and higher self esteem. This study will examine the effects of different methods of cooking skills delivery (active learning vs. passive learning) on Indonesian Generation Z student's food choice at school, self efficacy, and selfesteem.

1.3. Research Question

From the problem discussed in this research, there are some research questions that must be answered, namely as follows:

- Are there significant mean differences between classes exposed to Active Learning Methods with classes exposed to the Passive Learning Method in the context of Food Choice Wiseness, General Self Efficacy level and Self-Esteem level?
- 2. Is there any difference in the result of being exposed to different treatment (active vs passive) towards Generation Z's behavior in Food Choice Wiseness ?

1.4. Objectives of Research

The purpose of this research is to:

- To examine the significant mean differences between classes exposed to Active Learning Methods with classes exposed to the Passive Learning Method in the context of Food Choice Wiseness.
- To examine the significant mean differences between classes exposed to Active Learning Methods with classes exposed to the Passive Learning Method in the context of General Self Efficacy.
- To examine the significant mean differences between classes exposed to Active Learning Methods with classes exposed to the Passive Learning Method in the context of Self Esteem.
- To examine the difference in behavior caused by the exposure of different learning methods (active vs passive) towards Generation Z's wiseness in Food Choice.

1.5. Scope of Research

Limitations of the problem need to be done so that the discussion becomes more focused and targeted. Due to time constraints, costs, personnel and information, the scope of this research is as follows:

- a. This research is only conducted in the period July 2017 to August 2017.
- b. The area of experiment is restricted in SMP Labschool Kebayoran in the laboratory of physics.
- c. The experiment subjects are restricted to grade 7 students which consist of six classes (A, B, C, D, E, F).

- d. The classes that will experience ALM are classes A, C, and E with a total of 114 students.
- e. The classes that will experience Demo Class are classes B, D, and F with a total of 114 students.
- f. The number of menus that is being taught is four which consist of Banofee
 Pie, Fruit Salad, Healthy Sandwich, and Overnight Oatmeal.
- g. Every menu needs to have fruits or vegetables in the ingredient.
- h. This research discusses the more effective learning method in changing behavior through cooking skills.

1.6. Benefits of Research

The benefits expected by the author in this research are:

- The research is expected to give insights to educators regarding knowledge about how active learning affects Gen Z's food choice, self esteem, and self efficacy.
- Educators can maximize the quality and impact of the teaching and learning experience towards Generation Z students by knowing which learning method works best for gen Z's student.
- Generation Z can benefit a lot from learning a new skill. Beside the practical benefits, Generation Z are suspected to also gain a mental and psychological empowerment from the new skill.
- The writer will gain insight and identify the gap that can be used as a topic for her future research.

- The writer will gain the insight and data to finish the thesis in the journey of pursuing the master's degree.

1.7. Thesis Outline

Chapter I acts as an introduction, giving the reader an overview of the whole research. It is broken down into 6 sub chapter which are; Background, Research Problem, Objective of Research, Scope and Delimitation, Benefit of Research, and Thesis Outline.

Chapter II is the literature review, the writer collected theories through journals, books, and other publication sources. The theories that are being discussed in this chapter are theories about Active Learning, Self Esteem, Self Efficacy, and other supporting theory related to the topic.

Chapter III explains the methodology of the research. The research design is being thoroughly discussed in this chapter. The chapter consists of hypotheses, measurement, sampling, and analysis.

Chapter IV will be the data presentation whereas the data collected in the research that had been designed in chapter III will be presented.

And lastly in chapter V, the conclusion of the research will be stated, and recommendations regarding the usage of the thesis and its content will be described.