Introduction

- Autism Spectrum Disorder (ASD) is a developmental disorder characterized by impaired social interactions, deficits in communication, stereotypical behaviors and unusual or severely limited activities and interests, with the severity and symptoms expressed in each individual being highly variable (Koblinsky, 2012).
- The incidence of Autism has increased dramatically since the disorder’s identification in 1943. This trend magnifies the necessity for continued research and improved interventions across all areas of functioning.
- There are an abundance of nutrition-related issues common to the population, such as:
  - Overweight/obesity
  - Selectivity of intake
  - Reduced feeding ability
  - Sensory abnormalities
  - Gastrointestinal issues
  - Allergies

California State University, Long Beach implemented a cooking class specifically designed for students with ASD, that aimed to improve the experience with food while also enhancing their independence skills.

Statement of the Problem:

Many people with ASD have very specific, narrow food preferences due to differences in sensory processing (Tavassoli & Baron-Cohen, 2012). Developing and implementing nutritional therapies, such as through a hands-on cooking class, could enhance the individual’s experience with food, have positive outcomes on their nutritional health, and also increase their independence in meal preparation.

Purpose Statement:

The purpose of this thesis was to assess the impact of the LIFE Project Cooking class on the participant's food preparation habits. Specifically, the study utilized a quantitative approach to identify if learning how to handle and cook food altered the following variables in young adults with Autism: methods of cooking, frequency of self-quantitative approach to identify if learning how to handle and cook food altered the following variables in young adults with Autism: methods of cooking, frequency of self-quantitative approach to identify if learning how to handle and cook food altered the following variables in young adults with Autism: methods of cooking, frequency of self-prepared meals, confidence in participants’ ability to prepare meals for themselves, and increased the number of times per week that participants cooked for themselves.

Limitations:

- Small sample size
- Results may not be generalizable due to the fact that the severity of Autism lies on a spectrum, and our participants were considered moderate to high functioning.

Assumptions:

- Previously received diagnosis of Autism
- Participants are considered to be high-functioning
- Interest in learning how to cook

Methods

Sample Selection:
- Currently enrolled students at CSULB
- Clients of DSS
- Members of LIFE Project (*a program for CSULB students who have ASD or other social-cognitive deficits; it facilitates students to gain independence through a variety of interactive opportunities)
- College-aged males and females

Creation of cooking class:
- Prior to the Spring of 2015, Mrs. Emily Parker began creating the course for the LIFE Project Cooking Class
- This researcher assisted her in the development of the course used throughout the course & assisted throughout the first session (Spring 2015)
- A second session was led by Mrs. Courtney Dair in the Spring of 2016.

Instrumentation:
- A variation of the Pre-and-Post Intervention Questionnaire for Cooking Skills Program (Barton, Widen, & Anderson, 2011) was modified and utilized.
- Pre-tests were administered prior to the start of the first session (Spring 2015) & the same pre-tests were administered prior to the start of the second session (Spring 2016).

Procedure:
- Course consisted of six cooking classes; offered every Friday for a 6-week period
- Pre-tests were administered prior to the first of each session; pre-tests were coded to keep the data blind to this researcher
- The curriculum was carried out according to the course schedule
- Post-tests were administered & coded following the final class of each session
- Data was combined from the 2015 & 2016 sessions (n=11)

Data Analysis:
- Pre-and-post test data was coded & entered into SPSS software
- Paired t-tests were used to analyze Hypotheses 1–3
- A significance level of p ≤ 0.05 was used to reject the null hypothesis

Results

- Hypothesis 1 stated there would be no significant difference in the type of cooking methods used by participants before and after participation in the LIFE project cooking class.
- This hypothesis was accepted at p ≥ 0.05
- No significant differences were found in the type of cooking methods used by participants before & after completion of the LIFE Project cooking class.
- Hypothesis 2 stated there would be no significant difference in the frequency of meals prepared by participants before and after the cooking class.
- This hypothesis was rejected at p ≤ 0.05
- Participants on average increased the number of times/week that they cooked meals for themselves from an average of 2 times per week to an average of 2.91 times per week after completing the course.
- Hypothesis 3 stated there would be no significant difference in participants’ confidence in their ability to prepare meals before and after participation in the LIFE project cooking class.
- This hypothesis was rejected at p ≤ 0.05
- Participants on average reported an increase in confidence in their cooking ability after completing the course.

Summary of Results:
- Completion of the course did not significantly impact the style/method of cooking used by the students.
- Participants reported a significant increase in confidence in their cooking ability, as well as increased the number of times per week that the participants cooked for themselves.
- This was a very positive finding- the class translated to an actual behavior change!

Discussion

- Hypothesis 1 was accepted (no significant differences were found in types of cooking methods utilized by participants before and after completion of the course)
- Results may have been skewed due to wording of the question. If question had been asked in a qualitative manner, a different outcome may have been yielded.
- Hypothesis 2 found an increase in the frequency that participants prepared meals for themselves after participation in the class.
- Hypothesis 3 found that participants’ reported an increase in their cooking abilities after completion of the course.

Implications:

- Positive implications for the development of future nutrition interventions for people with ASD
- Ability of the course to enhance level of independence
- Inherent nature of cooking led to increased exposure to a variety of foods and cooking styles

- From a nutritional standpoint, this is the greatest accomplishment of the course
- Should be explored further in future studies

Conclusion

This study demonstrated that completing a cooking class specially developed for students with Autism had a positive impact on participant’s confidence in their cooking abilities, and also increased the number of times per week that participants cooked for themselves.
- The class enhanced necessary independence skills for anyone entering adulthood
- Preparing meals at home allows for more control over nutritional quality of meals
- Learning how to cook opens up opportunities for the social experience of cooking
- Developing and implementing nutritional therapies, such as exposure to a wider variety of foods through a cooking class, could enhance the individual’s experience with food as a whole, and potentially have positive outcomes on their nutritional and GI health, as well as increase their independence in meal preparation.
- The LIFE Project cooking class successfully facilitated both of these aspects, and the success of this intervention was widely based on its ability to target these two areas of importance.

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For more Information

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